

THE MILLING WORLD

AND

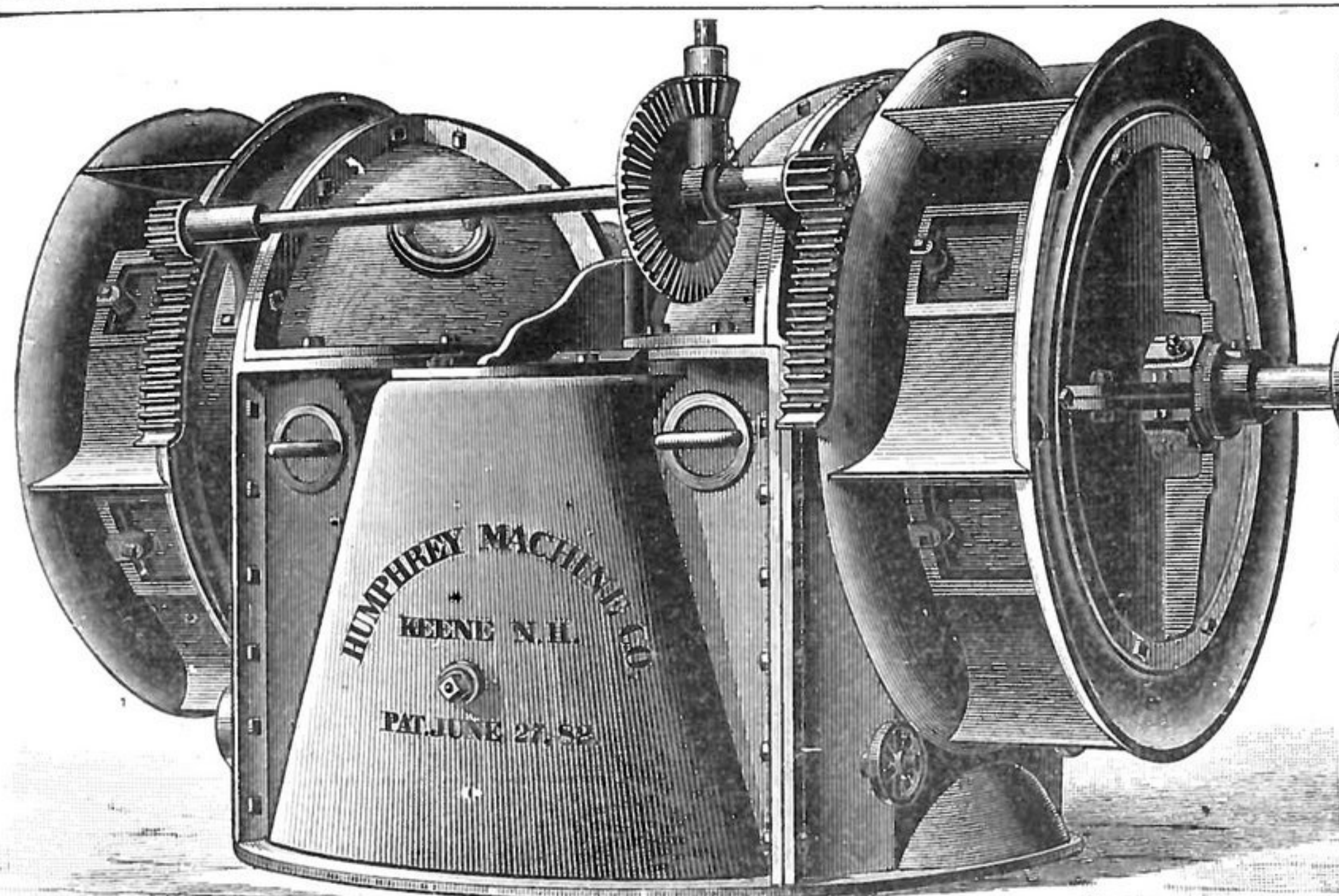
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXIII. No. 14.

BUFFALO, N. Y., DECEMBER 1, 1890

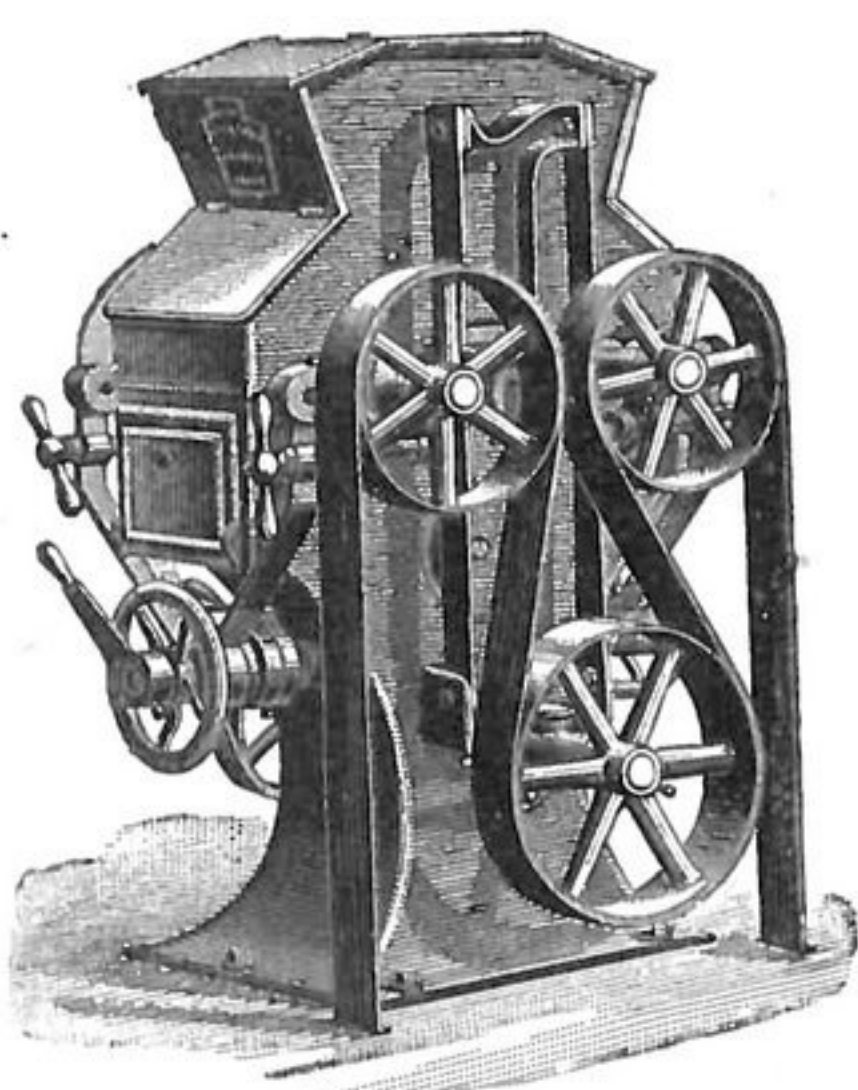
\$1.50 PER YEAR.



THE X-L-G-R OR IMPROVED CIRCUMSHOT Water Wheel

On Horizontal Shaft. Saves cost, annoyance and loss of power incident to use of gears. Affords more available power from water applied at full or part gate than any other. The cheapest, best and most desirable Water Wheel yet produced.

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Humphrey Machine Co
KEENE, - - N. H.



"Keystone" 4-Roller Wheat Mill.

FLOUR MILLS. CORN MILLS. HOMINY MILLS.

THE BEST MILL THAT HAS EVER BEEN BUILT IN GREENE COUNTY, PA.

SALEM, IND., September 15, 1890.

THE J. B. ALLFREE CO., INDIANAPOLIS, IND.

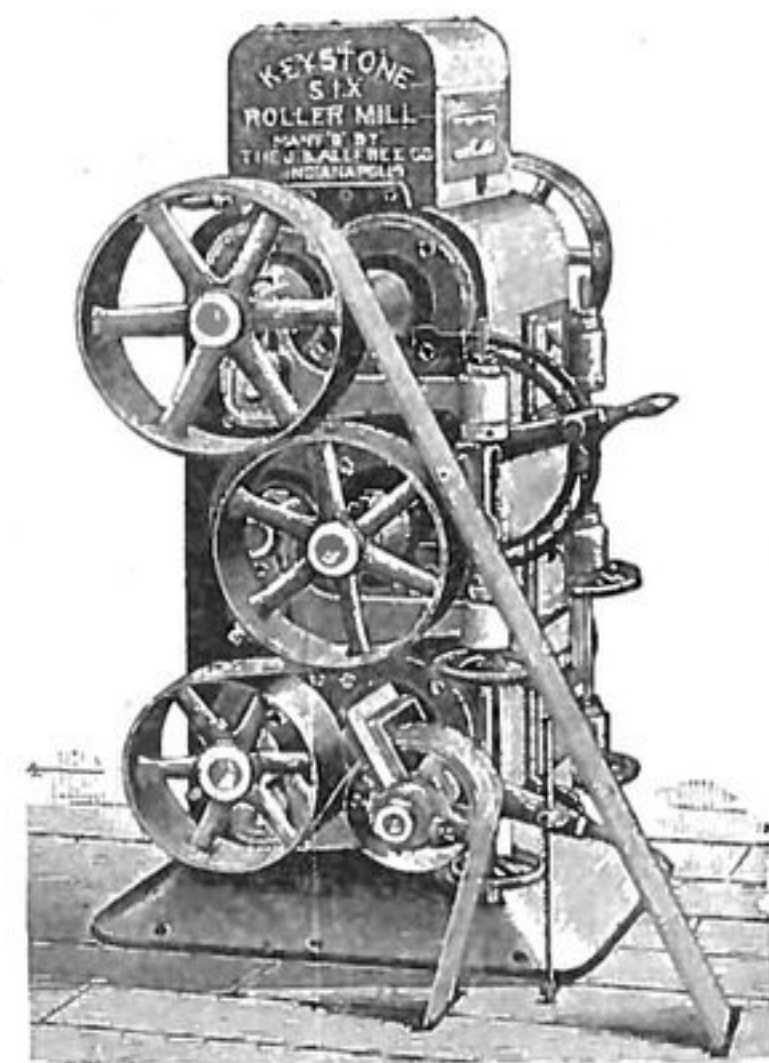
GENTLEMEN—We have been running the Mill you built for us for about five months, and we cheerfully say that it is giving entire satisfaction. We are doing splendid work. Our flour competes favorably with anything that comes to this market. Our percentage of low grade is very small and our clean-up is as good as we can ask.

Yours truly,

PERSISE BROS.

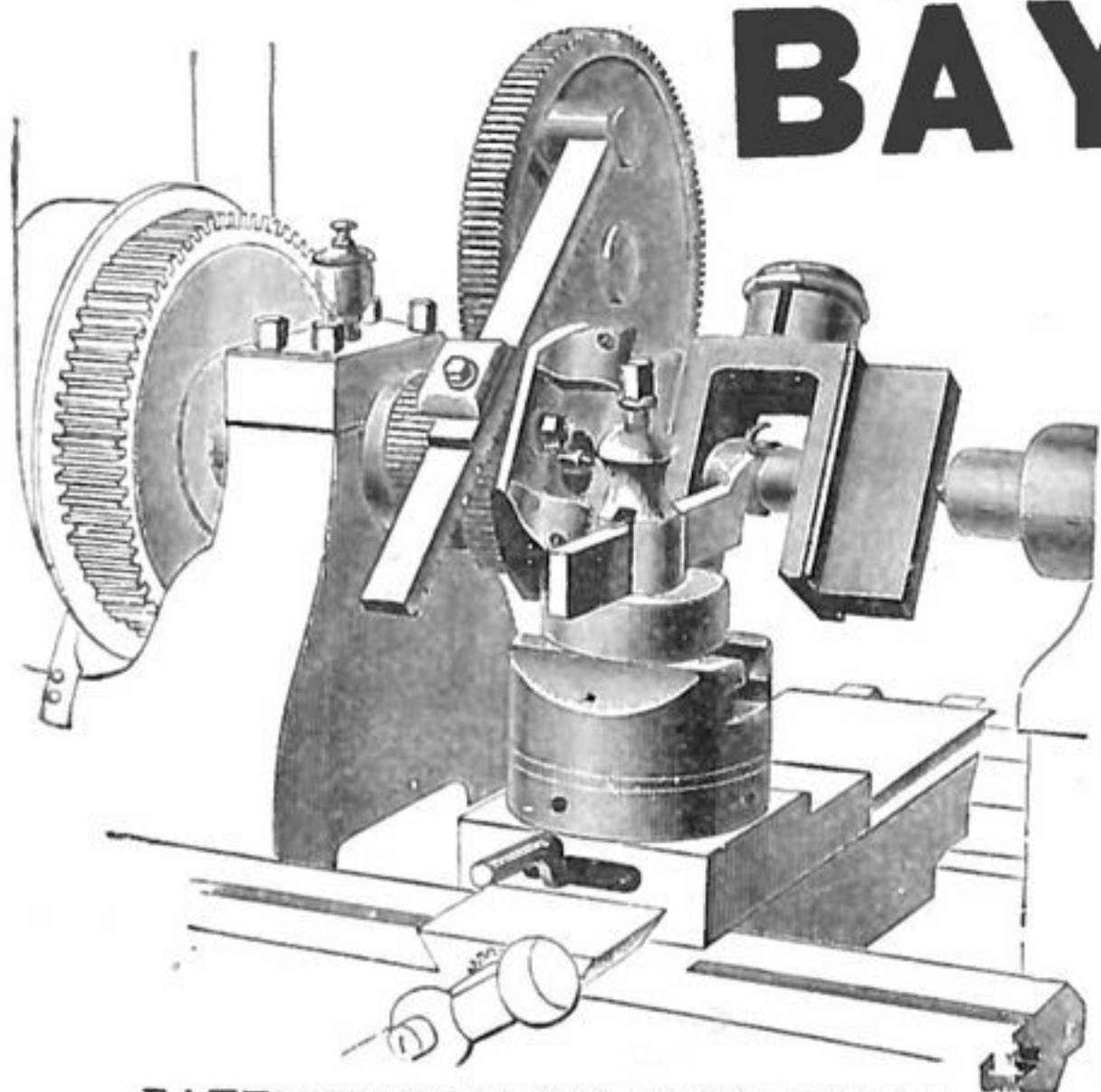
SEND FOR CIRCULAR OF OUR 6-ROLLER CORN AND FEED MILL.

THE BEST IN THE WORLD TO-DAY.



"Keystone" 6-Roller Corn & Feed Mill.

ADDRESS THE J. B. ALLFREE CO., 76 to 86 Shelby Street, INDIANAPOLIS, IND.



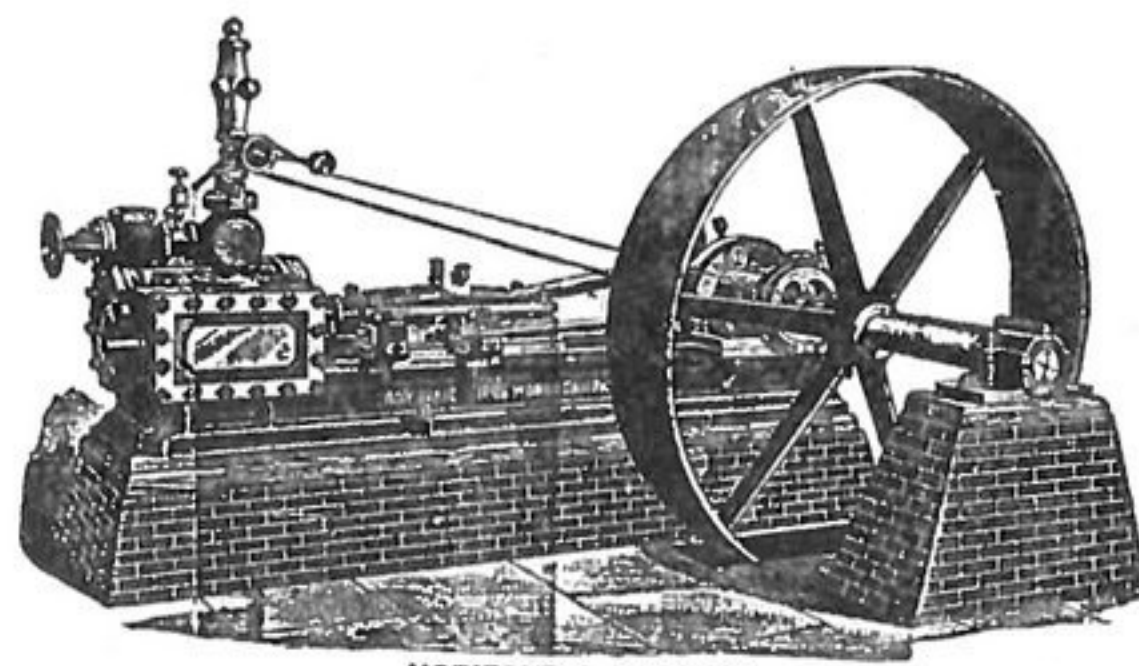
PATENT CROSS-HEAD MACHINE.

BAY STATE IRON WORKS

— MANUFACTURERS OF —

Engines, Boilers & Hoisting Machines

Also the Patent Cross-Head Machine and Acme Cube Pipe Tongs. We make either Center or Side Crank Engines, on same bed. Make engines from 5 to 250 Horse-Power. Have over 3,500 Engines and Boilers and over 1,000 Hoisting Machines in use, and all giving good satisfaction. Send for Catalogue and Prices.



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Noble & Hall, Box 462, Erie, Pa.

OFFICE OF CASE MANUFACTURING COMP'Y COLUMBUS, OHIO.

The Case Roller Mills. Over 14,000 Pairs in Use.

PLEASE READ OUR DESCRIPTION OF THEM, EVERY STATEMENT OF WHICH IS ABSOLUTELY TRUE.

PLEASE READ WHAT MILL OWNERS SAY ABOUT THEM.



The accompanying cut is a correct illustration of our latest improved Four Roller Mill. For fine work, great durability, simplicity, and general excellence, they stand "head and shoulders" above all others.

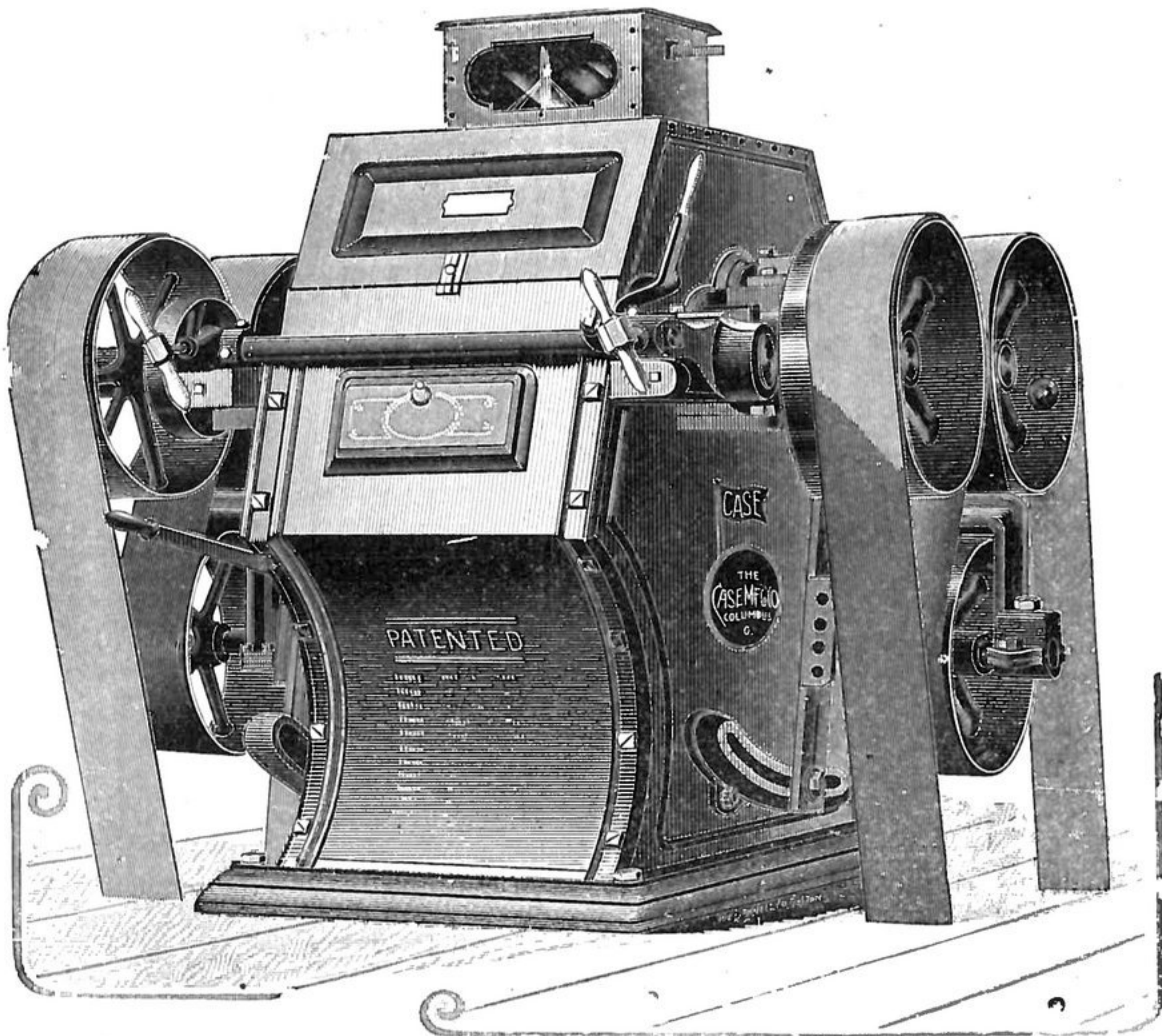
The frame is of iron with a heavy iron base.

The wood-work in top is of select cherry and black walnut, carefully shellacked and varnished.

The handles of adjusting screws and levers are finely nickel plated.

The joints are tight and dustless.

The adjustments easy, simple and perfect.



The roll bearings are wide and finely babbitted.

The belt drive is positive—no little short belts to slip.

The door for examining stock is a great convenience.

The arrangement for leveling rolls, simple and accurate.

The rolls can be thrown apart their entire length by one movement of the lever, and brought back again to original position, requiring no re-setting or experimenting.

Each machine is provided with our AUTOMATIC VIBRATING FEED, which requires no attention, and never fails to spread the feed the entire length of the rolls.



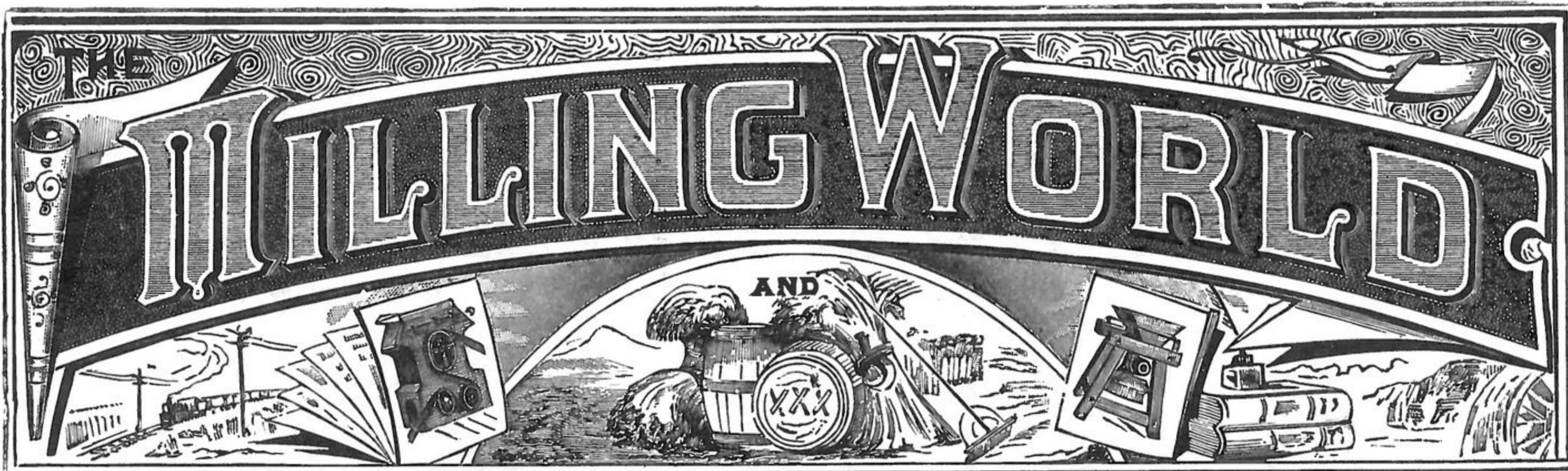
LISTEN! MICHIGAN MILLERS TALKING NOW.

CHARLOTTE, MICH., AUG. 5, 1890.

MESSRS. CASE MFG. CO., COLUMBUS, O.

Gentlemen: The mill is running fine. We are enjoying quite a fine little trade. Already have put over twenty tons of flour on the market here since we started the 7th of July, and it is giving elegant satisfaction. Every one who has seen our outfit pronounces it A 1, and the Case Automatic Feed can't be beat. In fact the Rolls are models of perfection. We are making a close finish and placing our goods alongside of the long system mills, carrying off the cake. We are highly pleased with the millwright work, and find your Messrs. McKenie and Shough congenial gentlemen to do business with.

Very truly yours, PERKINS & MOON.



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\$1.50 PER YEAR.

IF the Pacific Coast goes into the business of shipping wheat grain and flour over the Rocky Mountains, will not there be a "long felt want" on that coast to be "filled" by a live milling journal? Of course, when the Pacific Coast "calls" for a milling journal, no mere weekly or monthly will fill the bill. Nothing but a daily, with Sunday edition, will satisfy the wild and wooly west. Keep an eye on the Pacific possibilities.

WONDER how the certain advent of one new milling journal, and the prospective advent of a second and more important one in the very near future, will affect those milling journalists and machinery manufacturers who have for years argued that there are "too many milling journals in the field"? Can there be too much of a good thing? Are not good milling journals, devoted to the technics and the news of milling, circulating widely among intelligent millers, a good thing?

ESTEEMED cotemporaries will persist in palavering about "the new tunnel that is to utilize a fraction of the Niagara Fall." Please remember that the tunnel does not touch the Falls. It is a mere subterranean sluice running from a point nearly a mile above the Falls to the level of the river below the Falls. The great cataract will not be touched, and its "power" will show no diminution on account of the sluice located in the rock strata away off at one side. Please remember, also, that Buffalo is not "at" Niagara Falls. It is twenty miles away.

THE National Association ought to come to the front with a new journal. Surely that organization needs an "organ" more now than it ever did before. The National might start enough organs here and there to give it a seeming majority of the milling press for support. At present there are three milling journals "for" the National and seven "not for" it. The National needs to start only five journals to give it a majority. We fling out this suggestion free gratis-for-nothing, as it were. It would square well with the "flour-barrel-vote" clause in the National's new constitution.

DID ever one of the million or more perspiring milling poets, who are so incorrigibly fond of ringing the chestnut-ical changes on the old miller of the Dee, ever stop to inquire why that antiquated personage envied nobody, or why nobody envied him. We have a suspicion that the old rascal envied nobody because he was the one individual in the community who could, and did, rob everybody else. Human beings are incapable of harboring envy and thievery at the same time in the case of the same persons. We also suspect that no one in the Dee community envied the old rascal simply because no one else was willing to live by the wholly dubious means which he employed. So the old rascal went on, unenvied and unenvying, tolling ten to twenty times his legitimate amounts out of every grist, dishing the remainder out in the shape of mangled hog-feed at flour rates, and dying at last in the odor of smashed red-dog, to be embalmed in dubious poetry and made the bugaboo of future generations of millers, who are as free from his propensity

to thievery as they are from his immunity from envy. He may do very well in poetry, but in the reality he was no doubt a grasping, thieving, conceited, disagreeable old dusty. We warn all modern flour-makers against imitating his baneful, pernicious example, and as for the modern poets—well, advice on poets resembles water poured on a duck's back, the more one pours, the less there is on the back. Can not some ambitious inventor "roust out" a new subject for modern milling poets? Let the old miller of the Dee and the mossy old mill-wheel have a rest of about 47 centuries.

TRANSPORTATION facilities have so multiplied in the United States that the grain and milling industry is undergoing some remarkable changes. With Oregon, Washington, Idaho and California wheats carried over the Rocky Mountains to be ground in the Mississippi Valley, and with Washington, Idaho and Oregon wheat flour carried over the same mountains to be consumed in Chicago and other central towns, it is not easy to understand what certain commercial writers mean when they assert that "American milling has certainly reached a stable position geographically." It is plain that, once in the central mills and bakeries, the Pacific Coast wheat grain and flour have only to prove themselves good and desirable articles in order to increase and perpetuate their hold. Up to a very recent time the central and eastern millers and grain-growers have asserted that the Pacific wheats could not compare with those grown east of the Rocky Mountains, but now, with transportation facilities arranged to bring the Pacific wheats eastward, it will require something more than mere assertion to prove that they are inferior to the eastern wheats. Specimens of the Pacific grain show well. The berries are generally large, plump, full, and have a less troublesome seam than some of the eastern wheats. Specimens of the flour, ground singly, show well in color, strength and flavor under tests, while for blending they are said to be very suitable. All this implies an extension of the milling industry in the United States. So soon as the hustling northwesterners find their flour acceptable in the eastern markets, they will at once proceed to build mills to grind it. They see consumption rapidly overtaking supply in the United States, and they feel certain that the day is soon to come when it will be possible for them to grind their own wheat at home. There may be several very important, if not "supreme," milling centers west of the Rocky Mountains before the year 1900 has come. Manufacturers of milling machinery will do well to keep careful watch of the movement of Pacific wheat and flour across the Rocky Mountains. Should the movement of the flour, in particular, prove permanent, there will be a loud call for a great deal of flouring machinery on the Pacific Coast, and some of it, notably in the line of rolls and purifiers, may require to be quite different from that used on central and eastern grain. With the Pacific States growing from 70,000,000 to 100,000,000 bushels of wheat, and capable of growing double either of those amounts, it will require only favorable railroad rates to bring the wheat interest of those States into prominence, if not predominance.

The DAWSON ROLL WORKS CO.

FOUNDERS & MACHINISTS,

—MANUFACTURERS OF THE—

Dawson Roller Mills

—AND FURNISHERS OF—

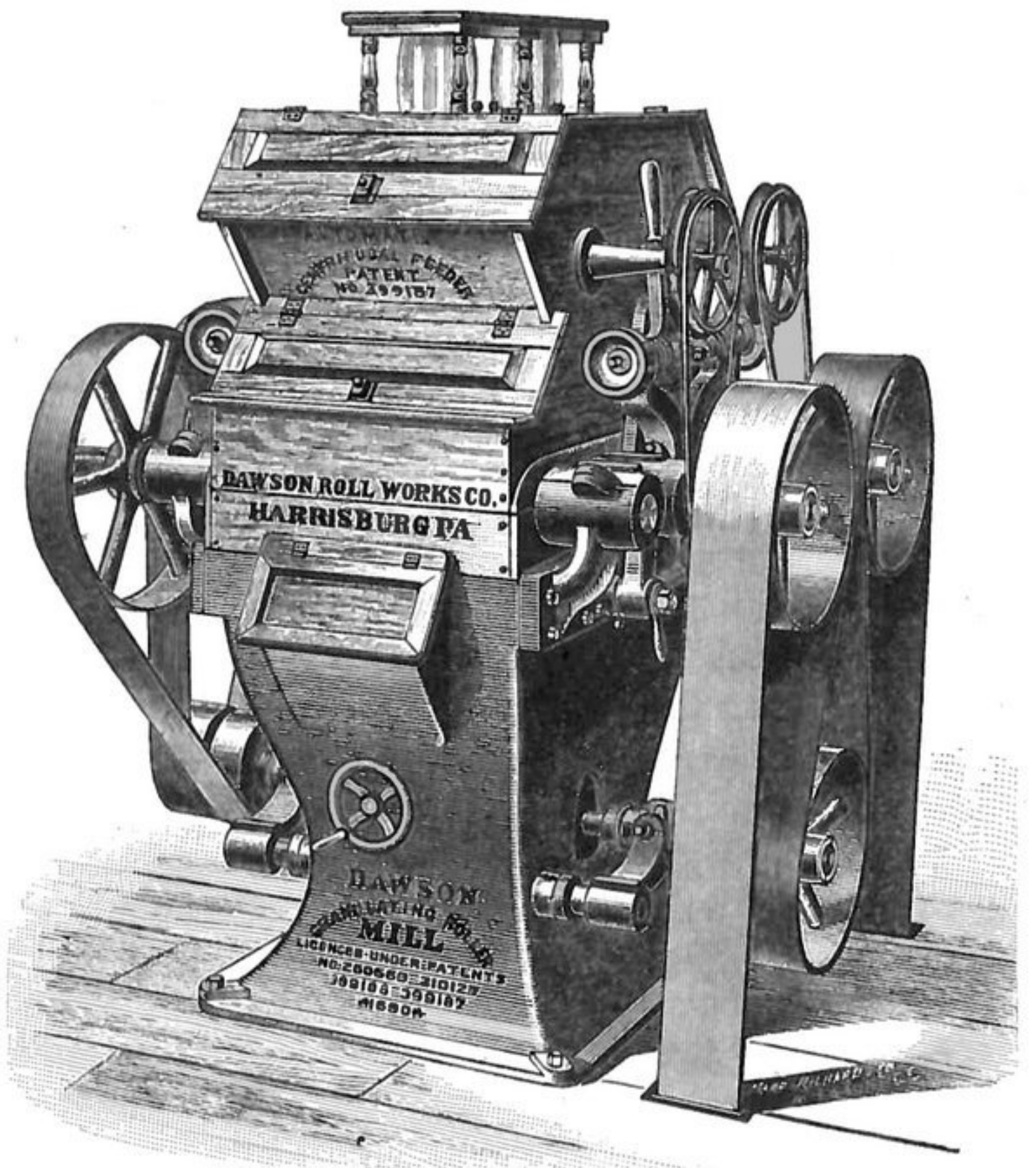
CHILLED IRON ROLLS

WITH DAWSON PATENT CORRUGATION.

ALL STYLES OF FLOUR MILL ROLLS RE-GROUND AND
RE-CORRUGATED WITH ANY FORM OF CORRUGATION.

We have had large and extended experience in grinding and corrugating chilled rolls for milling, and have one of the largest and most improved plants in the country for this work, which enables us to meet the most exacting requirements of the trade promptly.

ORDERS AND CORRESPONDENCE SOLICITED.



DAWSON ROLL WORKS CO.

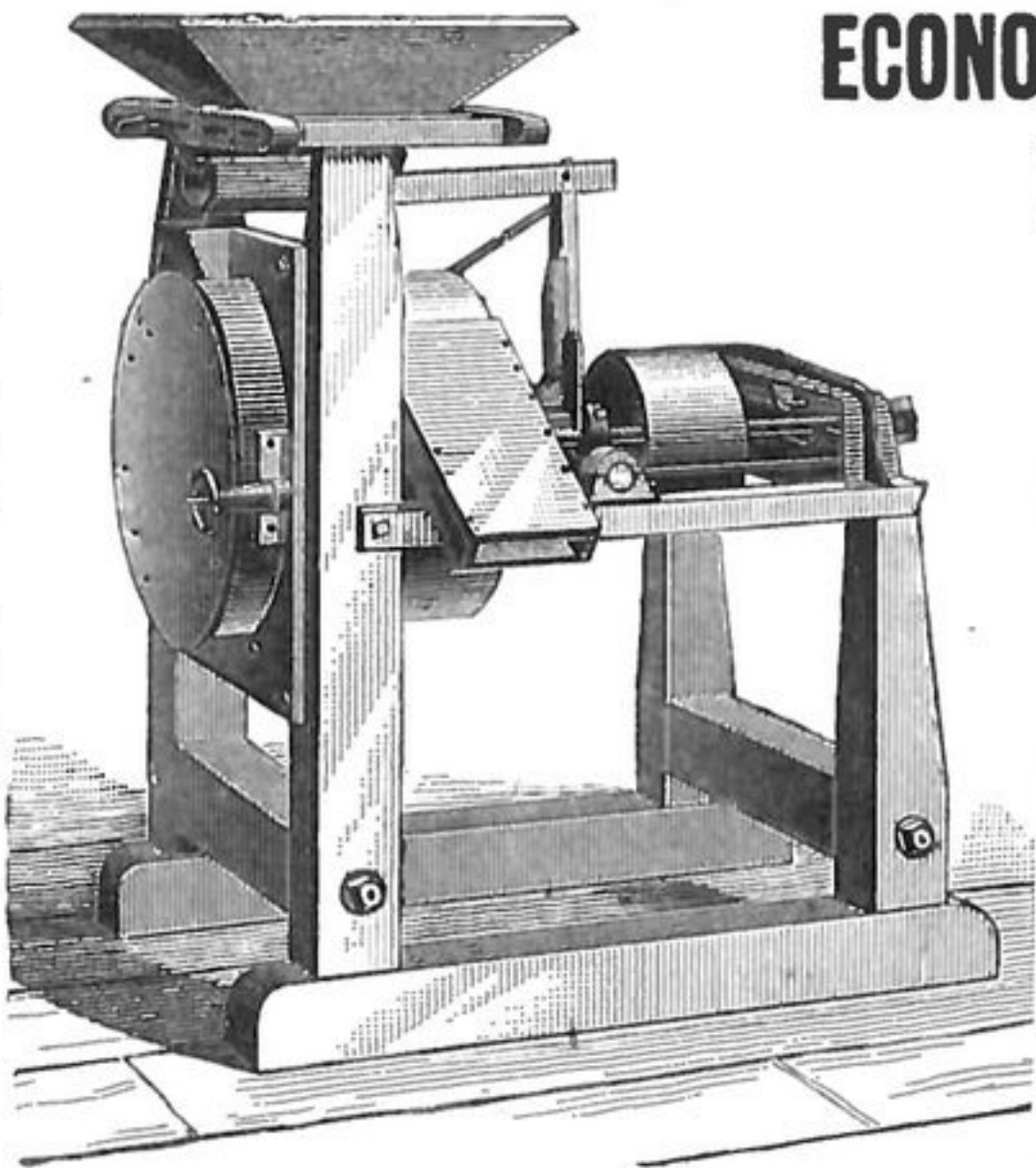
South and Short Streets,

HARRISBURG, PA.

BARTLETT'S VERTICAL MILL

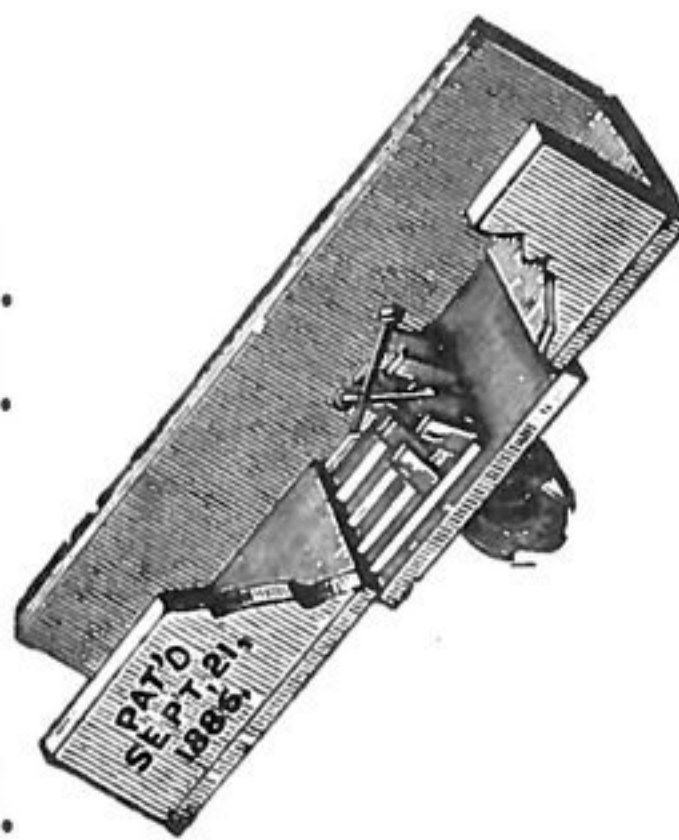
Grinding surfaces are of Old Stock French Buhr Stones.
Grinds Graham flour and Bolted Meal as well as all kinds of feed.

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MILL WAR-
RANTED.



ECONOMIC MAGNETIC SEPARATOR.

DUFOR
BOLTING
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LINK BELTING.
SPROCKET
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BUCKETS, ETC.



Durable. Cheap. \$7.00 Thirty Days' Trial.

G. O. BARTLETT, - CLEVELAND, OHIO.

The Grand Hotel

LOCKPORT, NEW YORK.

Remodeled last year. Refurnished entirely with new and elegant furniture. Fitted with all modern improvements, including Electric Lights, Steam Heat, Call Bells, Elevator, Etc.

FREE BUS TO ALL DAY TRAINS.

W. C. COMSTOCK, PROP.

When Writing to Advertisers Please Mention 'The Milling World.'



WHEN BUYING A BOILER FEEDER
BUY THE BEST.

Satisfaction

Guaranteed.

WRITE FOR CATALOGUE, PRICES,
TERMS, ETC.

AMERICAN INJECTOR CO., NO. 175 Larned St., West, DETROIT, MICH.



PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets,
Buffalo, N. Y.
McFAUL & NOLAN, - - - PROPRIETORS.
THOMAS MC FAUL. JAMES NOLAN.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application. Advertisements of Mills for sale or to rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD, BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office 10 cents must be added to pay postage.

WANTED, TO RENT.

A good Custom Mill, in a good grain section. Steam or water power. Address, MILLER, P. O. Box 170, Pocomoke City, Worcester County, Md. 252

FOR SALE AT A BARGAIN

I have a half interest in a Short System Roller Mill which I will sell at a bargain. Don't write unless you mean business. Address, GEO. FOSTER, Wakeman, O. 47

FOR SALE.

One No. 1 Howes, Babcock & Co., Silver Creek, N. Y., Lengthened Scourer and Smutter, nearly new. Address, CHAS. SCHOEPLIN & BRO., Gardenville, N. Y. 46

FOR RENT.

Clinton Mills, at Black Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 811 Main Street, Buffalo, N. Y. 6tf

FLOUR MILL WANTED.

Flouring-mill wanted at Evart, Osceola Co., Mich. Good wheat region, large territory. Correspondence solicited. GEO. W. MINCHIN, Evart, Osceola Co., Mich. 69

FOR SALE.

Rare chance, Grist, Saw, Planing Mill, Lumber and Coal Yard, doing good business. Growing village; 15 miles from Washington. Owner wishes to retire. Small capital needed. Terms easy. A. FREEMAN, Vienna, Va. 37

FOR SALE

Whole or part of a 125-barrel Flouring Mill, built entirely new from ground up. Equipped with latest machinery. Side track at mill door. Located in South Michigan. Big local and exchange trade. For further particulars address B. B., care of THE MILLING WORLD. 37

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.
One 14-Inch Vertical Feed Mill; best make, new, a bargain.
One No. 6 Dustless Separator; new, a bargain.
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.
One No. 2 Purifier. New. Best make. A bargain.
One 20-Inch Portable Mill.
One 18-Inch Double Gear Portable Mill.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

FOR SALE AT A GREAT BARGAIN.

The Reist Roller Mill, at Williamsville, 4 1/4 miles from Buffalo city line. Eighteen acres of land, with dwelling houses, twenty-two feet fall stone dam, Leffel Turbine water wheels, water the year round, steam power to assist in extreme dry seasons. Nine set 9x18 Stevens Rolls, two run of stone, three George T. Smith purifiers, grain-cleaners, scalping and bolting capacity for 80 to 100 barrels per twenty-four hours, etc., etc. Title perfect, bought at Sheriff's sale. Mill was mortgaged for \$18,000; will sell for \$5,500, without regard to loss, as I am no miller, but engaged in other business. The quick buyer will secure a great bargain. Address, WILLIS B. MUSSER, Lancaster, Pa., or my attorneys, BAKER, SCHWARTZ & DAKE, Esqs., Hayen Building, Buffalo, N. Y. 912

FOR SALE.

Flour and saw-mill with or without farm of 38 acres. Four buhr mill, with machinery and building in most excellent condition. Buildings on farm good. Good run of custom. Can run by water 9 months, also have steam power. Terms easy. On Big Indian Creek, 3/4-mile from Crandall, on Air Line. Mrs. C. KRACKMAN, Crandall, Ind. 36

HAVE the members of the Consolidated Roller Mill Company really concluded not to press their infringement litigation any further? It would be a wise move for them to give up their hopeless and expensive efforts in that line. This is a poor time and an unfavorable country for collection of royalties.

ACCORDING to the latest reports from Jackson, Michigan, the affairs of the Geo. T. Smith Middlings Purifier Company are by no means settled, in fact, they seem to be quite as far from settlement as they were on the day of assignment, some months ago. The appearance of Mr. Smith on the scene, with claims that can not be ignored and with ample capital to back him, means a settlement on a basis quite different from that outlined at first by the receivers. Mr. Smith offers to buy the plant of the company for cash. The receivers do not seem willing to accept his offer. There must be some sort of a settlement before long, and it seems safe to predict that Mr. Geo. T. Smith will have a potent hand in that settlement.

WE like mill poetry, even though it be generally as rickety-rotten and as fungoidal as the old mills which it springs from, but we can not endure the onslaughts on the language of the land made by some of the mill-poets. Here, for instance, is one Albert Ash Allen, an awfully artful and apt alliterative appellation, apparently, writing on "The Water Mill," and quoted by our esteemed Indianapolis cotemporary, "The Millstone," using the following curious expression in his last verse: "Thou never can decay!" Such language is to be expected from poets who are enthused by old mills. Mr. Albert Ash Allen should match "thou can" with "thou am," "they is," "we doeth" and a lot of similar verbal and grammatical crimes. In mill-poetry everything goes. Especially grammar!

ANTI-RAILROAD elements in the Western States have come to the front and captured several States. Now let the railroads prepare for general bankrupting and virtual confiscating laws at the hands of the new political managers in those States. There is little doubt that foolish legislation in the West is going to check the growth of that portion of the country. The farmers are going to "skin" the railroads, and the railroads will simply stop all developments, and settlers will not go into States where the agricultural and railroad interests are openly antagonized. It would not be surprising to see Iowa and one or two other anti-railroad States actually lose in population during the coming decade, in case the conflict between the farmers and the railroads is carried out on the lines now indicated.

DOUBTLESS the Argentine Republic is "the coming great competitor with the United States in wheat-growing for export," as British and European economists predict, but the Argentine Republic will have to get rid of her inflammable spirit, quit borrowing, go to creating and developing her own wealth without mortgaging herself hand and foot to European capitalists, and adopt regulations that will wipe out the present 210-per cent. premium on gold, before she can really begin to develop her wheat-growing capacities. At present she is tied up so that, in case of a good crop, all the profits will go to the Europeans whose cash she has borrowed, and in case of a poor crop she will be unable to pay the interest on her obligations to Europe. In the first case she will be bled to death. In the second case she will be squeezed to death. With the certainty of death by either bleeding or squeezing, it is not easy to see how the Argentine Republic is going to develop very rapidly during the next decade. Heavy indebtedness, unscrupulous management and a most undesirable class of immigrants do not augur well for the Argentine Republic.

POINTS IN MILLING.

LAST year it was the winter-wheat grinders who were obliged to use 4:30 and upward of wheat to the barrel of flour. This year the shoe is on the spring-wheat foot, and, judging by recent statements concerning quality, it is a pinching shoe. On a short trip in a spring-wheat section last week, I found the millers kicking like Texas steers over the new wheat. No complaint seems to be made concerning the flour, after it is once extracted from the grain, but the grinders do complain that it is "very hard wheat to grind, all the same!"

SLOWLY, but surely, Pacific Coast wheat is overcoming the prejudice that has always been held against it by flour-makers east of the Rocky Mountains. It is announced that some of the millers in St. Louis are grinding Oregon wheat with central-section wheat, using 25 per cent. of the Oregon grain, and the results are said to be so good that these millers propose to use 50 per cent. of Oregon grain. When once Oregon wheat begins to move across the Rocky Mountains, and when it proves to be easily grindable and to turn out a satisfactory flour, it will not be long before Washington and California wheats will follow. Hitherto the Pacific wheats have found their way by ocean to Great Britain, and a remarkable and important change will be brought about when they are adopted by central millers. The railroads are giving low rates to encourage the movement of Pacific wheats across the Rocky Mountains, and it will make a vast difference in Pacific coast cereal values when the growers on the coast find eastern millers competing with European dealers for their grain. It is plain that every bushel of wheat grain shipped from the Pacific Coast to central and eastern mills means more flour exported from eastern ports and less grain exported from Pacific ports.

CUTTING off the Pacific wheat supply from Great Britain in any large degree would mean a serious change to British milling in ordinary seasons, especially in case the grain cut off crossed over to eastern mills. I have talked with some millers who have used Oregon and Washington wheats for trial, and they say that the grain is good, ground either alone or in mixture with central grain. They claim that they can not understand the prejudice that has so long kept central millers solidly opposed to Pacific grain.

EVERY owner of a mill, who tries to keep his operatives supplied with small tools, is bothered and annoyed by the constant losses of the tools. What's the matter with giving the careless losers and smashers a polite invitation to replace the lost or smashed tool? I know several mills in which the losers and breakers are expected to replace, and I know that losses and breakages are few and far between in those mills.

THE man who "slats" a tool down and breaks it, or who uses a tool, drops it where he uses it, and forgets all about it until he wishes to use it again, soon finds a sprit of carelessness pervading his mind when he makes payment several times for broken and lost tools. It is not injustice to ask a workman to do this. There is no real difference, to the owner's cash account, between the dollar stolen from his pocket and the dollar tool lost, broken or stolen. In each case the owner is a dollar poorer through another's fault. It is right for the owner to resent cash thefts, and it is equally right for him to resent thefts or losses of tools that are the equivalents of cash.

CALL the breaker, the loser and the possible purloiner to look, Mr. Owner. Remember that the same watchfulness which is profitable at the grain-receiving door of your mill will be profitable all the way along from the grain-door to the shipping door.

THE owner must not depend too much upon the supposed honesty of employes. Not long ago I was visiting a mill that employs a large force of men. I was with the proprietor when the men were leaving the mill in the evening.

Some of the more frisky of the dusty "cubs" were pushing around among the men, in "cub" fashion, and one of the men, when half-way down the first flight of stairs, was justled by one of the "cubs." He slipped, sat down, and slid to the bottom of the flight. His dinner-pail, an enormous one, described a curved line, fell to the floor, opened, and deposited about ten pounds of flour on the floor within five feet of the feet of the owner of that mill. To say that the employe was disgusted and humiliated, and that the employer was disgusted and astonished, would be putting it mildly. A number of the men, who had similar dinner-pails, saw the mishap and the revelation, and they at once uncovered their pails and walked up to the employer and showed him that they, at least, were not "loaded" with his flour.

"WHAT do you think of that?" asked the owner, when all had departed. Said I in answer: "Let's see. If this fellow has been carrying away eight or more pounds of flour daily for a year, that means that he is the richer by at least 2,400 pounds of flour, while you are poorer by that amount. That would be flour enough to support a large family, as it is over 12 barrels. Even 4 pounds a day would mean about 6 barrels in a year. If he is the only one in the trick, you have not lost much, while, if others, two, five, ten or twenty, are in it, you may be losing a really considerable amount of finished product in the year. What do you think of it?"

HE answered: "Well, I think I shall look into the matter. Just see how easy it is, for a man inclined to be dishonest, to conceal one or two pounds of flour in a pocket! Why, 50 men could carry away 50 pounds of flour right before one's eyes, if they were so inclined. I shall investigate. That 'cub' shall have a 'raise' in wages. He opened that man's dinner-pail, and at the same time he opened my eyes to possible sources of loss, of which I had never even dreamed. I've heard of creamery men carrying home pails of butter with a covering of milk on top, but I never happened to think of the capabilities of a miller's dinner-pail or overcoat pocket. I shall watch."

MILLERS everywhere, who ship flour, grumble about what they call the "discriminations" of the railroads. Some of them, a few only, seem to make out a case that demands redress, while most of them have not the least real reason for their grumbling. Of course, every really just complaint should receive due consideration, but at the same time our dusty-coated friends should not forget that they favor customers whose purchases are large above those whose purchases are small, and they should be willing to allow the railroads to favor the miller who ships 50,000 barrels of flour above the one who ships only 500 or 5,000 barrels in the same or equal time. Business is business, with the railroads as well as the mills. The railroad spends about the same money in shipping ten cars as in shipping five cars, and it receives twice as much for the larger job. The mill will give better rates every time to the more important customer. Why should not the railroad favor the more important customer? I mean, of course, so far as equal distances are concerned.

PROSPECTIVE PURIFIER LITIGATION.

Millers throughout the United States will be interested in the following article, from the "Saturday Evening Star," of Jackson, Michigan, which was published November 15th: "It may not be generally known that C. H. Plummer, the wealthy lumber dealer of Saginaw, who also has large interests in Jackson, has allied himself with Geo. T. Smith in an attempt to recover the value of 4,000 shares, or \$200,000, in Purifier stock. A fortnight ago he began suit in the Circuit Court for this amount, and the summons is returnable on Dec. 2. In a long article published lately in the 'Courier' he maintains that he has done and is doing his utmost to reconcile the conflicting interests and restore the Purifier works to their former greatness, and those who know Mr. Plummer believe him sincere in his statement.

He has made the receivers an offer of \$50,000, cash, for the works, and he now stands ready to perform this, or he will ask the receivers to apply to the court for permission to sell them to the highest bidder and will allow his offer of \$50,000 to stand as the highest bid. The receivers claim that the works are far more valuable than this. The receivers, Messrs. Emerson and Eldred, have applied to Judge Hosmer for an order to compel Geo. T. Smith to appear before Circuit Court Commissioner Edwards and furnish information to the creditors and others concerning the affairs of the company. The Judge issued the necessary order, but on Wednesday Mr. Smith by his attorney, Geo. Weadock, of Saginaw, filed a motion in Judge Hosmer's court asking that the order be set aside. In an affidavit Mr. Smith denies each and every allegation of fraud and wrong-doing. Hearing will be given on Monday next, which of course will supersede the order for Mr. Smith to come before our Circuit Court Commissioner on that day. Mr. Smith sends to this paper the following as his reasons for not acceding to the receivers' demands:

'JACKSON, MICH., Nov. 13, 1890.

To the Editor of the Star:

DEAR SIR:—The Receivers of the Geo. T. Smith Middlings Purifier Company have for some cause, better known to themselves, made oath before the courts of Wayne county that I have refused to give information concerning the business of the company that would be for the interest of the creditors; and such statement has been published in nearly all the leading papers of the State. This statement being untrue, I do not wish to be put on record in this false manner, and I therefore request you to publish the following correspondence:

'JACKSON, Oct. 27, 1890.

Mr. Z. C. Eldred, Receiver for the Geo. T. Smith M. P. Co.:

DEAR SIR:—It has come to my knowledge that the interest in the Canada property belonging to the Geo. T. Smith Middlings Purifier Company, of which you are one of the two receivers now in charge of the assets of such company, are being wrongfully disposed of by other parties. Mr. Emerson, one of the interested parties assisting, as I understand, in so disposing of such property, to the detriment of the creditors and stockholders of the company, is also one of the receivers. As I am apprised, it is my duty to give you the following notice: And I do hereby notify you that there is an agreement between the Jackson City Bank and said Company which should be taken into consideration, as I understand the Jackson City Bank is the medium through which such property is being disposed of, assisted by said receiver, Mr. R. H. Emerson. I understand the receivers will be held responsible for any damage resulting to the Company or its creditors by their neglecting to protect the interests of the Company or its creditors in the rights of the above mentioned property. Yours truly,

GEO. T. SMITH.'

"A few days after handing the receivers the above letter the receivers, accompanied by their confidential man, visited my office. I had previously informed them by two letters that I was always ready and willing to give any information in my power to assist in the interest of the creditors or stockholders. What occurred in my office at the time of the above mentioned visit and the grounds they have for making affidavit that I would give no information in regard to the business of the company will be better understood by reading the following letter, which was handed the receivers by me on the morning of November 4th, which is the last communication that has passed between us. It will be understood by this letter that I did and always have held myself ready to give information in the proper way:

'JACKSON, Nov. 4, 1890.

Receiver of the Geo. T. Smith M. P. Co.:

GENTLEMEN:—I address you, as I wish to take exception to the manner in which you visited my office yesterday. I notified you that I was always ready and willing to do anything or give any information in my power to assist in the interest of the creditors or stockholders. This was sincere on my part, but your manner of entering my office, and your style of doing business while there, was in my opinion too much after the style of Jesse James and his way of doing

business. You entered my office in a very abrupt manner, outnumbering me three to one, and demanded me to tell you all I knew at once about the Purifier matter or business. I thought this was a very unbusiness-like way of doing things; it is not the manner usually practiced among business men. Now, I have had time to reflect upon your questions: The first one, I believe, was to tell you all I knew about the Purifier business that would be of benefit to its creditors. I have been connected with the business about fifteen years, and I candidly believe it would take me at least one year to tell you all the different transactions I have had a hand in or should have some knowledge of. Now, I do not believe the creditors would care to wait for their dividends for me to tell all this unnecessary batch of stuff; it is not the usual way of getting information of this nature, nor is it what I intended when I notified you. I think the proper way to do would be, when any business came up requiring any information from me, that you come to my office as any other business man would, and if possible I would give the information required. This way of doing would avoid the whole year's talk, as I have described. I refused to answer many of your questions for the reason, largely, that your number was three on your side against myself alone, and your appearance and manner could not help but indicate that your business in my office was to gain some point that would be of benefit to yourselves instead of the creditors. I was fearful that my answers would be misinterpreted and used to my disadvantage. Now, if you will examine the statements of some of the parties you had with you, that were made by them just before the assignment, over their own signatures, then again, a few months later, over the same signatures, you will see my fears are not groundless. Now, I mean that my refusing to answer your questions or give information required should not be considered by you as final or conclusive; but I insist if you are to do business with me, you must approach my office as all other business men do, and treat me in the same manner that one gentleman treats another. I do not mean that you were particularly ungentlemanly; neither was Jesse James, as I am informed. You are well aware you did not come into my office for the sincere purpose of getting information in the interest of the creditors, but, as I believe, to get some advantage of me to use for your own personal ends. I gathered this from your manner while in my office. Yours truly,

GEO. T. SMITH.'

BREAD IN SOUTHERN SPAIN.

Writing from southern Spain, a traveler says: The bread in the south of Spain is delicious; it is as white as snow, close as cake, and yet light; the flour is the most admirable, for the wheat is good and pure, and the bread is well kneaded. This is the way they make it: From large, long panniers filled with wheat they take out a handful at a time, sorting it most carefully and expeditiously, and throwing every defective grain into another basket. This done, the wheat is ground between two circular stones, as it was ground in Egypt 2,000 years ago, the requisite rotary motion being given by a blindfolded mule, which passes around and around with untiring patience. A bell is attached to his neck, which, as long as he is in movement, tinkles on, and when it stops he is urged to his duty by the shout of "Ar a mula!" from some one within hearing. When ground, the wheat is sifted through three sieves, the last one of these being so fine that only the pure flour can pass through it. This is of a pale apricot color.

The bread is made in the evening. The flour is mixed with sufficient water, with a little salt in it, to make into dough. A very small quantity of leaven or yeast in one batch of household bread, as in Spain, would last a week for the 6 or 8 donkey-loads of bread they send every day from their oven. The dough is put up into sacks and carried on the donkey's back to the oven in the center of the village, to bake it immediately after kneading. On arriving there the dough is divided into portions weighing 3 pounds each. Two long, narrow wooden tables on trestles are then placed down the room, and a curious sight may be seen. About 20

men, bakers, come in and range themselves on one side of the table. A lump of dough is handed to the nearest, which he begins kneading and knocking about with all his might for about 3 or 4 minutes and then passes it on to his neighbor, who does the same, and so on successively until they all have kneaded it, when it becomes as soft as new putty and ready for the oven. Of course, as soon as the first baker has handed the first lump over to his neighbor, another lump is handed him, and so on until the whole quantity of dough is kneaded by them all. The bakers' wives and daughters shape the loaves for the oven, and some of them are very small. They are baked immediately.

COTEMPORARY COMMENT.

There are two sides to the tariff shield. It is free-trade on one side and protection on the other. Exporting millers and other exporters see little else than the free-trade side, while the domestic producer is set on the home-market theory. "What have we to do with abroad" and how much? It is like trying to balance a ten-cent piece on the point of time to determine the exact point where the difference in interest resides.—*Indianapolis "Millstone."*

WHEAT EXPORTS FOR TEN YEARS.

Statistician Dodge of the Department of Agriculture says in his November report on crops: The fluctuations of exports of wheat are abrupt and wide, and the causes of change are clear. The largest exportation, not only in the period, but in the history of the trade, was in 1880-81, amounting to 186,321,514 bushels (wheat and flour), or three-eighths of one of the largest crops. In 1888-89 the exportation, the smallest of the decade, was only 88,600,743 bushels. The second year of the ten witnessed a drop of 64,000,000 bushels, while a rise of 26,000,000 occurred the next year. Then a fall of 36,000,000 is noted, a rise of 21,000,000, another drop of 38,000,000, and a jump of 59,000,000, the seventh year of the series ranking in volume next to the first. In the following year the decline was 34,000,000, and in the next 31,000,000 more, the only instant of two successive seasons of decline. The following table indicates the course of these changes:

	Pacific ports		Atlantic ports		Total wheat.
	Wheat. bushels.	Flour. barrels.	Wheat. barrels.	Flour. bushels.	
1880-81.....	24,703,774	976,766	125,861,703	6,969,020	186,321,514
1881-82.....	43,004,486	1,373,098	52,267,316	4,542,588	121,892,389
1882-83.....	27,713,319	1,443,867	78,672,509	7,761,797	147,811,316
1883-84.....	22,766,198	1,621,753	47,582,814	7,530,507	111,534,182
1884-85.....	32,397,047	1,532,151	52,256,667	9,115,994	132,570,367
1885-86.....	26,074,462	1,396,435	31,684,747	6,782,806	94,565,794
1886-87.....	24,857,309	1,402,705	77,114,640	10,115,744	153,804,970
1887-88.....	20,739,672	1,267,508	45,049,589	10,696,066	119,625,344
1888-89.....	29,468,720	1,411,900	16,945,409	7,962,903	88,600,743
1889-90.....	27,456,908	1,605,073	26,930,859	10,626,638	109,430,467
Total.....	279,181,895	14,031,256	554,366,253	82,104,063	1,266,157,086

The aggregate of production, as estimated, for these ten years is 4,496,953,588 bushels. It is 450,000,000 bushels per annum, discarding fractions. Of this nearly 127,000,000 constitute the annual exports. The average exportation has therefore been 28.2 per cent., though in the first year of the decade, 1880-81, the exports were 37.4 per cent. of the product. These exports will continue to decline in proportion, and even in volume, as population increases and grain production is extended in competing countries which are not developing so rapidly in general industry. Now, the reader may ask, is this fluctuation, which is a marked feature of this table, due more to variable foreign demand than to changes in home production? Is it due to the Liverpool demand or to the home demand? To both, but in far larger proportion to the home demand, which must be met at whatever cost. There is a wider annual fluctuation in the production of the United States than in the combined production of other countries. In 1880 there was a surplus over home requirements of at least 200,000,000 bushels; in 1888 the surplus from the crop, according to the estimate, was only 69,000,000 bushels, trenching on prior reserves 19,000,000 bushels to eke out the actual sum of exports, which were less

than half those of 1880-81. The foreign trade was cut down inexorably by the requirements of home consumption. When our wheat shall be all required at home, there will be no exports, as prices will be permanently higher here than at Liverpool, as they have been occasionally heretofore, temporarily checking exportation.

Another peculiarity of the history of our wheat exportation is the changing proportion of wheat and flour. In 25 years, from 1825 to 1850, the sum of wheat exports in the form of grain was only 15,714,039 bushels, while the exports of flour were equivalent to 162,731,805 bushels of wheat. It was shipped as flour almost exclusively. In 1859-60 the wheat shipments were 4,155,152 bushels, and the flour equal to 11,752,182, and in the ten previous years the wheat had been about 52,000,000 bushels and the flour 125,000,000 bushels. At this date a great change occurred. It was a day of revolution, industrial and commercial, as well as political. For four years the average shipments of wheat exceeded 32,000,000 bushels, and of wheat, both as flour and grain, over 51,000,000, grain largely predominating each year. A sudden decline occurred at the close of the war, and for 1867-68 flour predominated. During the decade following 1860 the extremes of annual exportation ranged from nearly 12,000,000 to over 69,000,000. The extraordinary increase of foreign demand between 1870 and 1880 dazed and dumbfounded both farmer and grain dealer, and excited in both the craze to supply "the markets of the world" with wheat. In 35 years, 1825 to 1860, there had been 378,340,302 bushels of wheat exported; and in two years, from the crops 1879 and 1880, the exports were 366,625,694 bushels.

A partial failure of crops in western Europe for several successive years caused a large portion of this demand. Not only American growers, but those of Australia, India and South America, were aroused to competition for the great demand of which they vainly assumed the continuance. The acreage had been doubled in 15 years in this country. In 5 years the record of the Statistician was as follows: "The expected has arrived. The prediction has been fulfilled. Wheat was in 1885 at the lowest figure in England for 125 years." Following better yields in Europe, the imports of wheat declined, and have never since equaled the figures of those years of scarcity. The reduced product of the present year in this country and some others, and diminished stocks of grain in the principal foreign markets, have already advanced prices materially, which will continue fairly remunerative until a reduction is again compelled by increasing stocks and products.

HYBRIDIZATION OF WHEAT.

Within the last 10 years considerable attention has been paid to the hybridization or cross-breeding of wheat. By hybridization is meant mingling the life or blood of one variety with that of another or, in other words, inoculating or grafting. Many kinds of grain and vegetables will readily mix when sown or planted near each other; but this is not the case with wheat. Any one may mix a dozen or more kinds of wheat together and sow them promiscuously on a piece of ground. At harvest time each grain will be found to have produced a head of its own kind, and not once in 10,000,000 times will they hybridize or mix. But this does sometimes happen, and in this way have some of our most popular and productive kinds originated, such as the Fultz, Clawson, Fulcaster, Valley, Martin, Amber and many others.

BURIED MILLS AND BAKERIES.

Among the things of interest laid bare by the excavation at Pompeii, in almost a perfect state, were several bakers' shops, all in a tolerable state of preservation. The mill, the ovens, the kneading-troughs, the vessels for containing flour, water and leaven have been discovered and seem to leave nothing wanting to our knowledge. In some of the vessels the flour remained, still capable of being identified, though reduced almost to a cinder. In the center some lumps of whitish matter resembling chalk remain, which, when wetted and placed on a red-hot iron, gave out the peculiar odor

which flour thus treated emits. Even the very bread in a perfect though carbonized form has in some instances been found in the oven. One of these bakers' shops was attached to the house of Sallust, another to the house of Pansa. Probably they were worth a handsome rent. A third which we select for description, says our traveler, as a type of the whole, seems to have belonged to a man of higher class, a sort of capitalist; for, instead of renting a mere dependency of another man's house, he lived in a tolerably good house of his own, of which the bakery and mill form a part. It stands next to the house of Sallust, on the south side, being divided from it only by a narrow street. Its front is the main street, or Via Consularis, leading from the gate of Herculaneum to the Forum. Entering by a small vestibule, the visitor finds himself in a portico of ample dimensions, considering the character of the house, being about 36 feet by 30. At the end of the portico is an opening through which the bake-house is entered, which is at the back of the house and opens into a smaller street, which, diverging from the main street at the fountain by Pansa's house, runs straight up to the city walls. The work-room of the mill and bakery is about 33 feet long by 26. The center is occupied by four stone mills, exactly like those found in the other two stories, for all the bakers ground their own flour. The writer was present at the excavation of this house and saw the mills at the moment of their discovery. The iron work, though rust-eaten, was yet perfect enough to explain satisfactorily the method of construction.

WHAT IS "MUMMY WHEAT"?

The famous scientist, M. de Candolle, points out that the so-called Egyptian or "mummy" wheat, which is popularly believed to be descended from grain found in mummies, has no Hebrew or Aramæan name. Yet had it existed, its peculiarities could scarcely have escaped the notice of the Israelites. It has no Berber name, no Sanskrit, Persian or Indian names. The Arabic names assigned to it by Delille may, for any proof to the contrary, apply to other kinds. Unger adduces no proofs in support of his belief in its existence in ancient Egypt; neither has it been proved to exist in the Swiss lacustrine beds. Its identity with the Krithinias of Theophrastus is doubtful. De Heldreich states that its introduction into Greece is of modern date. Pliny mentions a fingered wheat with gigantic ears. Historic and linguist evidence is in favor of its derivation from common wheat in the course of cultivation, the "fingered" type probably not being much older than Pliny's time. This conclusion would be upset had *T. turgidum* ever been found growing wild, but that is not the fact. Notwithstanding Koch's assertion, the existence of "mummy" wheat, outside cultivation, near Constantinople and in Asia Minor, is generally denied. Bossier's "Herbarium," so rich in Levantine species, contains no example; its indication as "indigenous in Egypt" by Schweinfurth and Ascherson is shown to be a typographical error. M. de Candolle likewise points out that there is no evidence that a single grain of ancient wheat from any Egyptian sarcophagus ever germinated. The growth is not an impossibility, botanically speaking, but the proofs are wanting. The experiments most often quoted are those of Count Sternberg of Prague. The grains in this case were taken from the coffin of a mummy by a traveler worthy of all credence, but proofs of their antiquity there were none. Grains of maize, introduced by the Arabs, have been found under precisely identical circumstances. The seed known in commerce as "mummy" wheat is unassociated with a tittle of proof of superior antiquity.

CONCERNING the roller flouring-mill in Attica, N. Y., the Attica "News" says: "Since this mill passed into its present enterprising and capable hands it has been made a complete success, and our town can now boast of having one of the best equipped and best conducted roller flouring-mills in Western New York. On the 15th of June last Mr. C. J. Bork, of Buffalo, purchased the mill, since which time it has been conducted in a manner which has established for

it an honest pride from every citizen. The benefits an institution of this kind confers upon a town goes without saying. Besides creating a competitive grain market here and the employment it gives to a number of hands, the mill is spreading the name of our town far and wide and making it famous as the place where the finest quality of flour is manufactured. The mill is a substantial and commodious six-story building, equipped from top to bottom with a complete line of machinery of the improved full roller process, and has a capacity of 400 barrels per day. The mill has been thoroughly overhauled by Mr. Bork and is simply complete in every particular. Mr. Bork has just ordered and will put in, in the near future, a 240-horse power Corliss engine. A very large business is done, and to meet the demands of the mill extensive quantities of grain are bought, for which the highest market price is paid. The superior quality of the flour manufactured has created for it a ready demand, large shipments being regularly made to Buffalo and the eastern markets. The leading brands are the "C. J. B. Best," "Silver Spring," "Prize" and "Sweet Home." The Buffalo office is located at 20 Eagle street. Special attention is given to custom work, farmers coming here from miles around to have their grinding done. The mill is creditable to our town and to the enterprise of its proprietor."

A REPORT from Union, Oregon, says: "The purchases of grain have stopped at this place, owing to the lack of cars for shipment. The warehouses are all filled to their utmost capacity. The result is a decline in the price of wheat. No greater calamity ever came over the farming communities of Grand Ronde than this lack of transportation facilities. Those who must sell their wheat must sell at a great sacrifice. The Board of Trade recently passed resolutions asking the company for cars, but they have received no help."

CATARRH.

CATARRHAL DEAFNESS—HAY FEVER.
A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King street, Toronto, Canada.—*Christian Advocate*.

Sufferers from Catarrhal troubles should carefully read the above.

SPECIAL NOTICES.

BOLTING CLOTH.

Do not order your cloth until you have conferred with us. It will pay you, both in point of quality and price. We are prepared with special facilities for this work. Write us before you order.

CASE MANUFACTURING CO.,
Columbus, Ohio.

Office and Factory, 5th Street, north of Naughten.

TOLEDO MILL PICKS AND STONE TOOL MFG. CO.

Manufacturer

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MILL PICKS.

Made of the best double-refined English cast steel. All work guaranteed. For terms and warranty, address, GEO. W. HEARTLEY, No. 297 St. Clair Street, Toledo, Ohio. Send for Circular.

N. B.—All Mill Picks ground and ready for use (both old and new) before leaving the shop. No time and money lost grinding rough and newly dressed Picks. All come to hand ready for use.

ALSO MANUFACTURERS OF

Shafting, Pulleys, Hangers, Coupling, Machine and
Jobbing, Etc., Etc.

Practical Notes

NUMEROUS NEW ELEMENTS.—A list of the discoveries of chemical elements in eleven years (1877-1888) has been compiled by Prof. H. Carrington Bolton, and show that no less than 58 supposed new elementary substances have been announced during that period.

GENERAL NOTES.

THE French scientist, Victor Meunier, asserts that the American dentists insert in American teeth, each year, the enormous amount of about 1,800 pounds of the precious metal, which represents nearly \$450,000. This gold is buried with the person in whose mouth it is placed. Making allowance for the rapid increase in the population of the United States and for the continued deterioration of American teeth, it appears that in less than 100 years the American cemeteries will contain a larger amount of gold than now exists in France.

TYPICAL HORRIBLENESS!

THE WATER MILL.

The water mill,
I love it still,
Now it is old and gray,
Though, to my mind,
A bit declined,
It never can decay!

There on its crest
The swallows' nest
And aged mosses are!
While down the keep
The waters sleep
Beside the rotten bar!

The pond'rous wheel
Is like the keel
Of Time-forsaken boat!
Or mossy bridge
Upon the ridge
Of old ancestral moat!

But time brings back
The click and clack,
The waters pure and fleet,

When on the brim
Were shadows dim
Of weary little feet!
And then a maid
Beneath the shade
Of trysting willow tree!
And then a youth,
In perfect truth,
Two lovers fair to see!
* * * * *
But Time did pass,
The miller's lass
Grew lovely unto death;
The stream ran dry,
And by and by
The miller ceased his breath.

So, water mill,
I love thee still,
Now thou art old and gray,
Though, to my mind,
A bit declined,
Thou never can decay!

Albert Ash Allen.

INSURING GROWING GRAIN.

Says a California insurance journal: The insurance of growing grain is a department of underwriting that is attended with considerable risks. In no other branch of the business does the moral hazard cut so prominent a figure. The "special" whose duty it is to visit the grain fields and to accept such lines as are offered him must be equipped with sound judgment and a clear appreciation of human nature, or his company will suffer very severely before the crops are harvested. Given a certain lack of conscience and daring, incendiarism is easy enough anywhere, but no where can it be practiced with such facility, with so slight a possibility of detection, as in a wheat field. A passing spark, and you have a fire which rapidly and effectively realizes on the value of the grain as insured. Yet, in spite of the risks, several companies engaged in this business have sent out into the field youthful "specials," lacking both the experience and the judgment to tackle this line, and the result of their unwise competitive methods will aid in diminishing prospective profits by increasing the loss ratio. Excessive competition has led to companies writing insurance on growing wheat, while it is still green, before the grain has formed. This is the period when the farmer's risk is greatest, because a hot wind may arise at any moment and burn away the ripening heads. Then the yield is valueless but for hay and fodder. Supposing a rancher is unfortunate enough to be entirely dependent upon the result of this harvest, as is very often the case, the tempta-

tion to let a spark drop from his pipe is terribly strong. There is no doubt in the world that but for growing grain insurance there would not be half the grain fires in the interior that annually occur in the summer months. It is a good thing to look after and a bad thing to take big chances on.

MILLING PATENTS.

Among the patents granted November 25, 1890, are the following:

G. A. Culver & J. F. Culver, Blue Springs, Neb., No. 441,140, a dust-collector, comprising the combination of the upper cylindrical and the lower conical section, each of said sections being composed of a series of segments having flanges at their meeting edges to form vertical recesses or pockets, said upper and lower sections being provided at their meeting edges with connecting-flanges, through which the said pockets extend, the casing thus formed being provided at its upper end with a tangential inlet for dust-laden air and with a central air-outlet, and at its lower end with a dust-outlet.

Wm. T. Black, Crittenden, Ill., No. 441,225, an automatic grain-weighing machine, comprising the combination of the sides, the tilting measure, the hinged doors, the springs engaging the same, the pegs for disengaging the springs, the rollers for closing the doors, the steps upon the sides, the inclined way beneath the measure and the pivoted direction-board.

Marshall A. Harmless, Schell City, Mo., No. 441,302, a grain-measure, comprising the combination, with the seed-board having openings and a central space equal in area to one of said openings, and a measuring box subdivided into chambers, of a recorder located above the box, an arm depending therefrom, and a stud projecting from the box and adapted to operate the arm.

Orville M. Morse, Jackson, Mich., No. 441,372, a separating-machine, comprising the combination, with a closed tapering separating-chamber provided at its large end with an outlet for the heavy material and at its small end with an outlet for the light material, of a feeder which delivers the material to be separated into the chamber, and a rotating air-propelling device arranged within the chamber, whereby the air contained in the chamber is caused to circulate from the axial portion of the chamber to the peripheral wall at the large end, thence along the peripheral wall to the small end, and thence back to the large end through the axial portion of the chamber, thereby separating the heavy from the light material and discharging the products of the separation, respectively, from the large and small ends of the separating-chamber.

James E. Welch, Petersburg, Ill., No. 441,623, a feeder for flour-mills, comprising the combination of the horizontally and vertically movable feed-boards supported from a fixed object by suitable links, and the spring-valves with means substantially as described for imparting motion to said boards, and also the combination of the divider of inverted-V shape and the horizontally-reciprocating feed-boards, supported at the lower ends of said divider and forming continuations of its sides, with the adjustable valves supported in the housing and forming with said boards an automatic feed.

We have, by the aid of the Secretary of the Treasury, just escaped from a panic resulting from our importations of merchandise in anticipation of the effects of the new tariff law, and were not in a financial situation to take also a load of stocks. This was the bears' opportunity and they availed themselves of it.—*Kansas City "Commercial."*

DO YOU SELL SEEDS?—If so, do you consider the quality when buying? Poor seeds are the cause of more poor crops than all the atmospheric and climatic changes that occur. Yet you continue right on buying an inferior brand because it is cheap. Is this economy? It can easily be remedied by writing to Messrs. W. H. Morehouse & Co., Toledo, Ohio, wholesale dealers in grain, clover and timothy seed. Their Anchor Brand of choice grade clover, which has been recleaned and bulked, is the finest in the market. Also their orchard and lawn grass, Hungarian, Red Top, and White Clover, are equally as good. Any one wishing to purchase or sell seeds in bulk should correspond at once with above named firm.

THE UNION



Is the peer of High Grade Bicycles in the country. It combines with its beauty, a rare degree of both strength and ease, and the exquisite workmanship on the wheel puts it far ahead of all competitors.

Write for New Catalogue.

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THE BEST AND CHEAPEST CORN AND COB CRUSHER

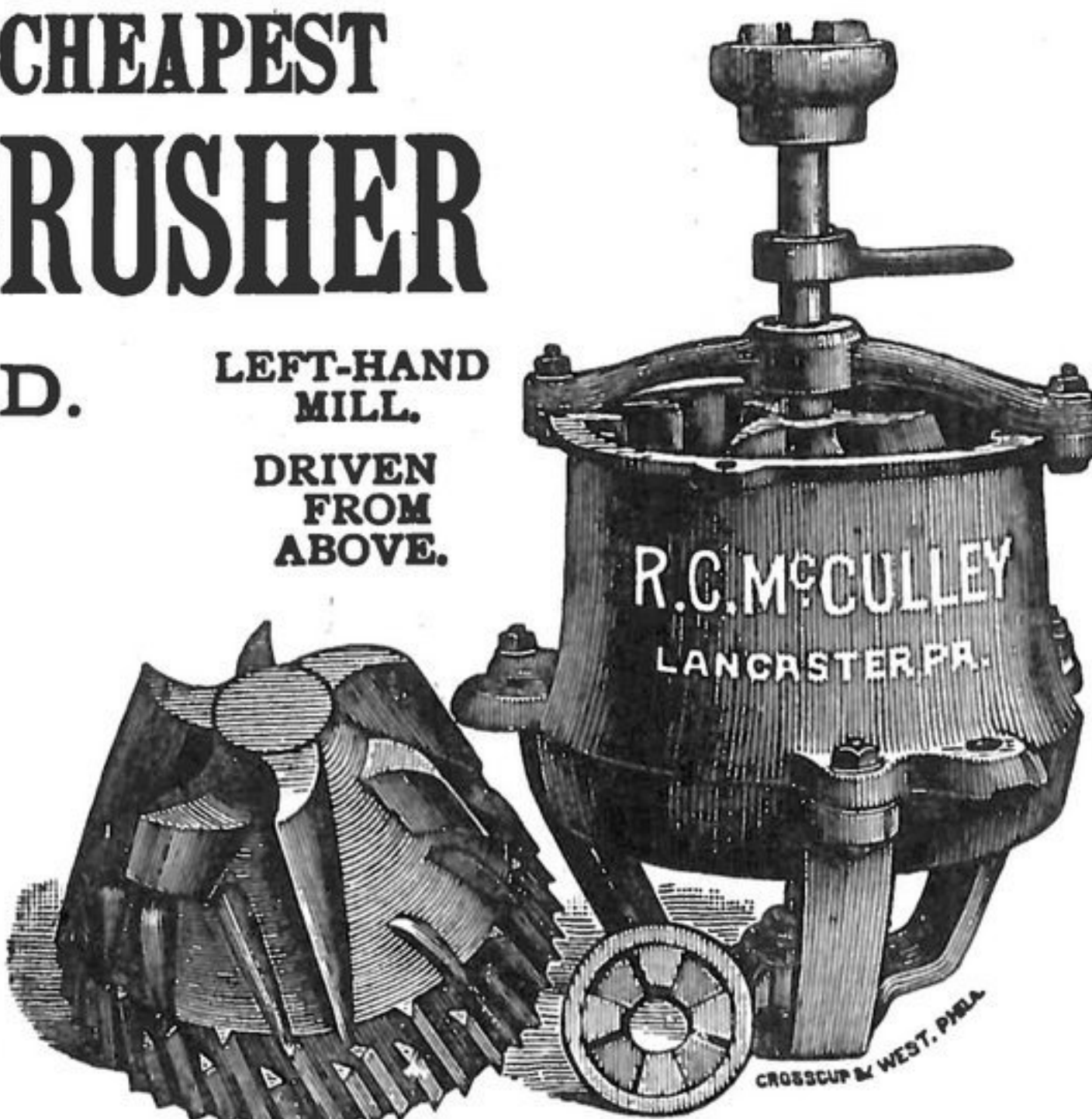
IN THE WORLD.

All wearing parts cast of a steel mixture. Notice difference in construction. Most area where most work is done, where all other crushers have least area where most work is done. Low priced machinery is not the cheapest, considering durability and efficiency. Sent on 80 days' trial when satisfactory reference is furnished.

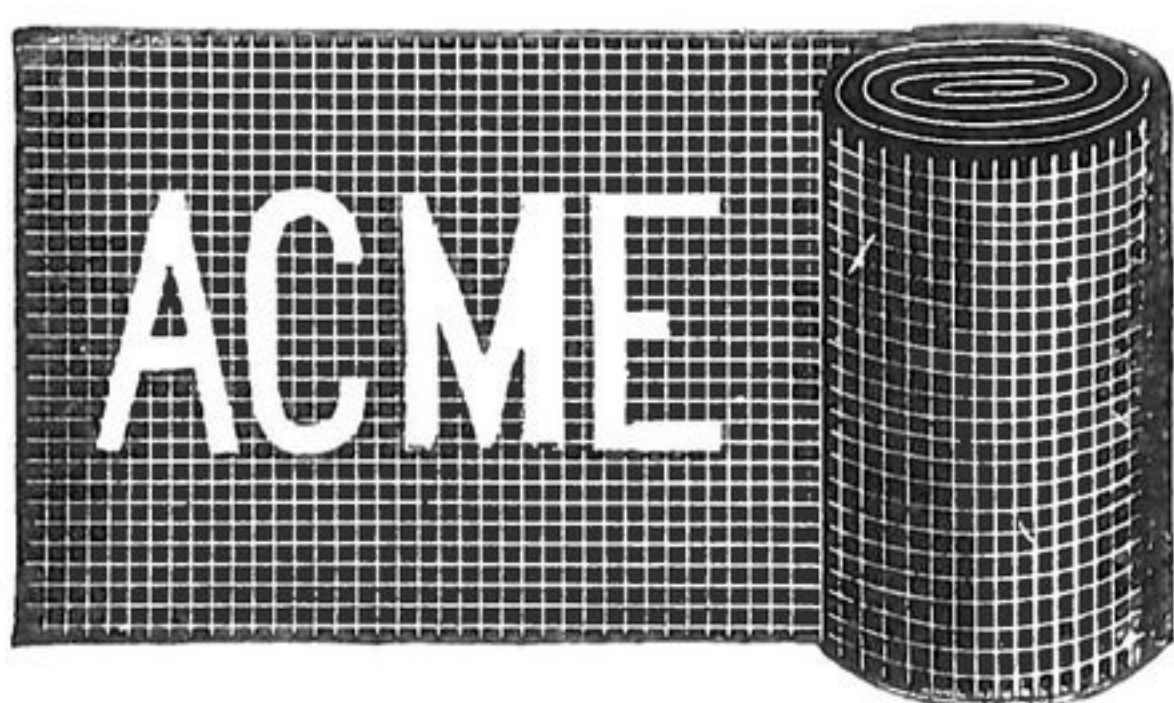
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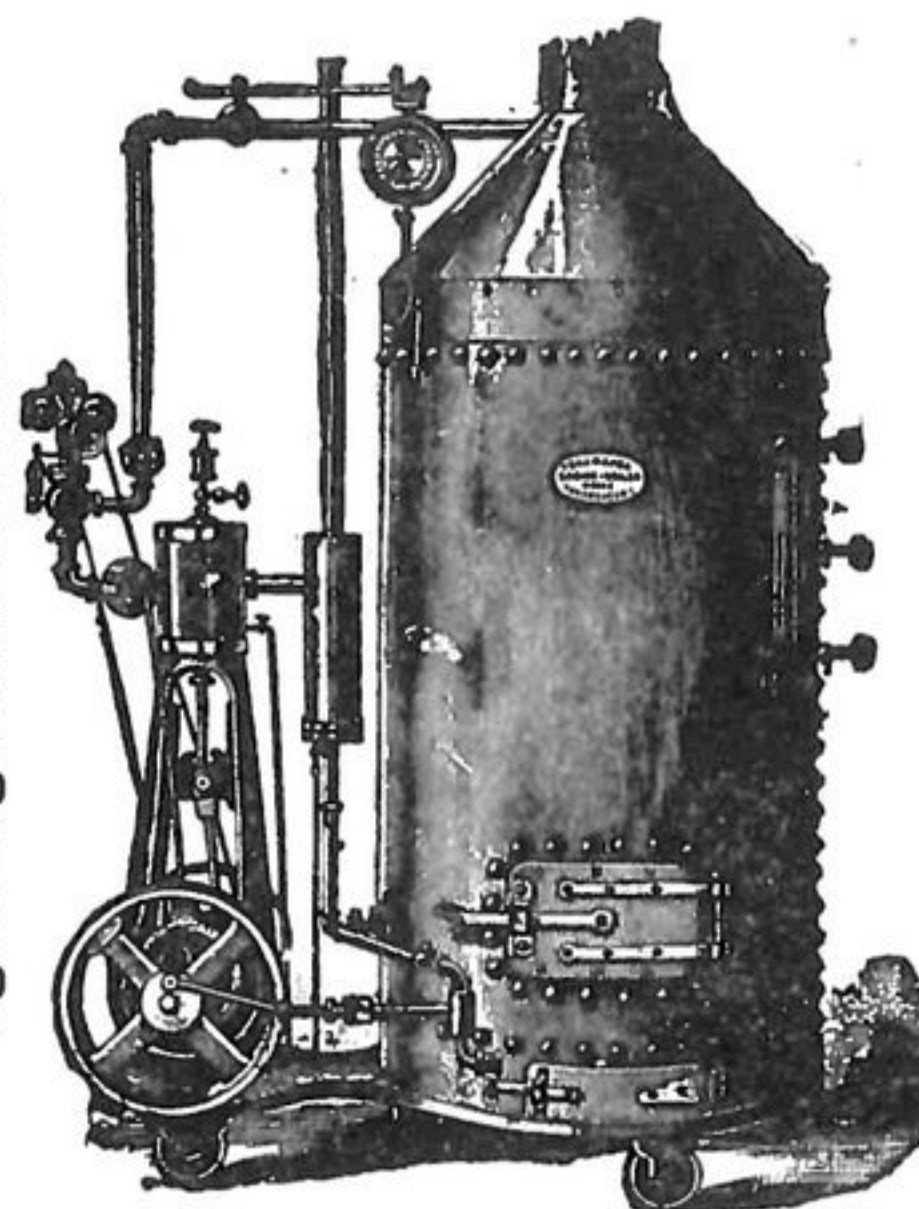
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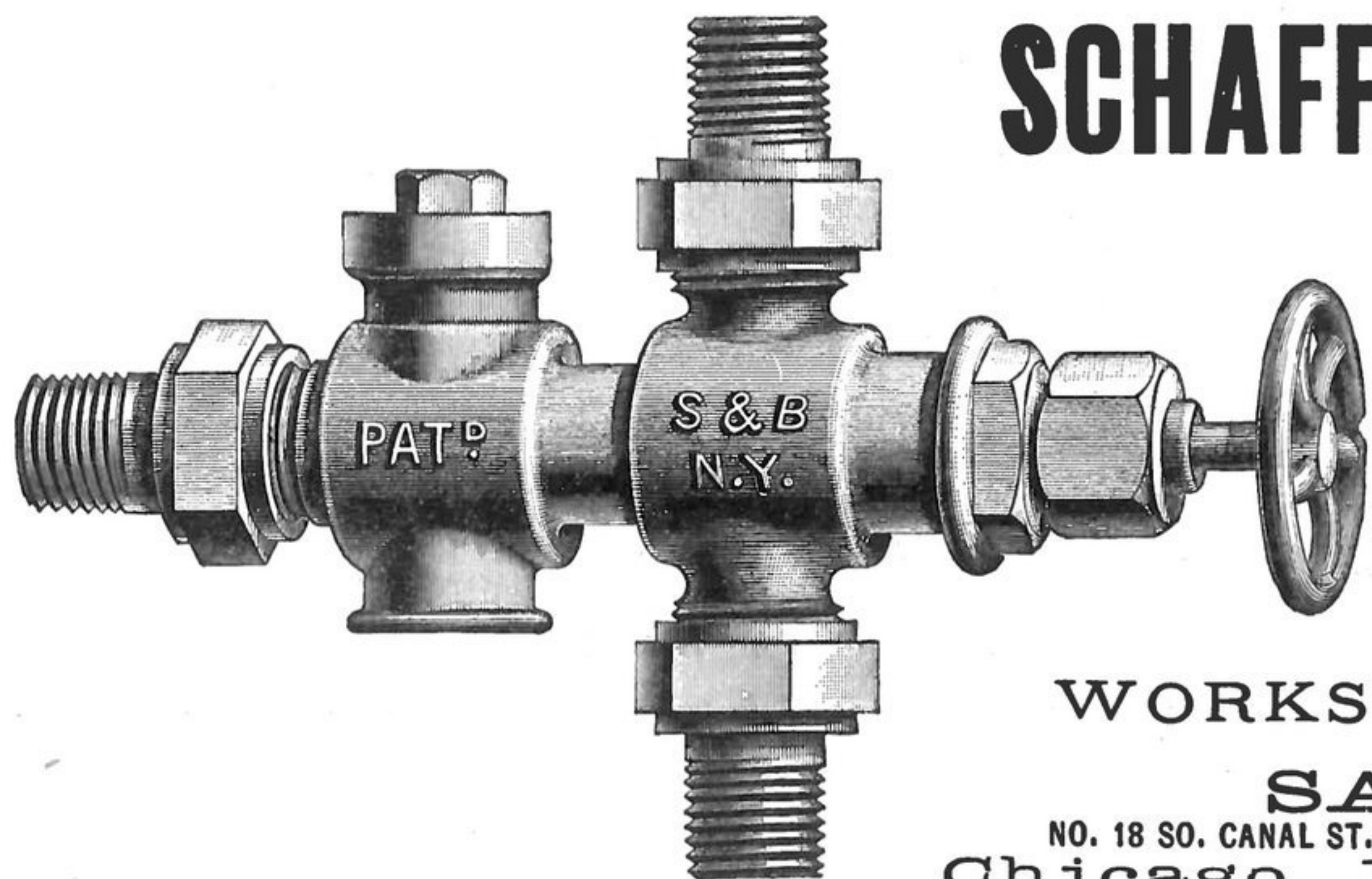
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ARMITAGE, HERSCHELL & CO.

Tonawanda N. Y.

Sometimes Corrugated Iron is represented to be "just as good as" our Patent Edge Corrugation. While this is complimentary to our material, unfortunately it does not work out well in practice. The only Corrugated Iron that can be recommended for roofing is manufactured by

The Cincinnati Corrugating Co.
PIQUA, OHIO.



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Pressure Gauges for all Purposes

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IMPROVED RESTARTING INJECTORS
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WORKS AT BROOKLYN, N. Y.

SALESROOMS:

NO. 18 SO. CANAL ST.,
Chicago, Ill.

NO. 40 JOHN STREET,
New York.



Nesbitt & Jones, millers, Goldendale, Wash., dissolved.

Wm. Peter's flour-mill and elevator, Columbiaville, Mich., burned; loss \$50,000.

A. L. Menwell's feed-mill, Faribault, Minn., burned; loss \$8,000; partly insured.

Slaughter, Wash., men incorporated the Slaughter Mill Co., to build a flour-mill.

Mann Bros.' flouring-mill, Waco, Tex., burned; loss \$20,000, with small insurance.

The Case Mfg. Co., Columbus, Ohio, have an additional order from R. L. Lewis, Talledaga, Ala., for 2 pairs of rolls.

J. M. Ostwald, Trautman, N. C., has placed his order with The Case Mfg. Co., Columbus, Ohio, for rolls and purifiers.

The Case Mfg. Co., Columbus, Ohio, have an order from Wallace Clark, Nevada Mills, Ind., for 4 pairs of rolls and other machinery.

J. O. Edwards, Troy, O., is remodeling his mill and putting in a full line of The Case flour-dressers, besides some additional rolls and scalp-ers.

The Case Mfg. Co., Columbus, Ohio, have received the contract of O. Boutwell & Son, Troy, N. Y., for all rolls, scalp-ers and flour-dressers for a full roller rye mill of 150-barrel capacity.

The Case Mfg. Co., Columbus, O., have an order from L. B. Weisenburgh, Frankfort, Ky., for 6 pairs of rolls, 1 purifier and 1 bran-duster to be placed in the mill of Stone Bros., Stamping Grounds, Ky.

The Star Mill Co., Gothenberg, Neb., have placed an order with The Case Mfg. Co., Columbus, Ohio, for 2 pairs of rolls for corn and feed, also 6 Case flour-dressers, to take the place of their hexagon reels.

The Second District Miller's Association will meet at Fort Scott, Kansas, Tuesday, January 13th, 1890. This will be an important meeting, as visitors are expected. The officers of the State Association and parties from St. Louis have promised to be present. For further information address H. H. Brown, secretary, Parsons, Kans.

The Millers' Association of Southeastern Kansas held a meeting at the Matthewson House in Parsons, Kansas, near the close of October. After the business of the meeting had been disposed of a banquet was given. Among those present were Charles McCrum, Garnett; C. Brown, Austin; L. Johnson, Erie; S. Delano, Fulton; P. Dalrymple, Fort Scott; R. McKinley, Pittsburg; S. Lemon, Coffeyville; W. S. Hoke, H. H. Brown and J. H. Bishop, Parsons.

Says the Winnipeg, Manitoba, *Commercial*: It is no doubt a pleasure to a patriotic Manitoban to tell that the Northwest this year has raised a crop of wheat aggregating at least 15,000,000 bushels, but it is only wisdom to admit that, owing to a wet fall, and other unfavorable circumstances never before experienced in the country, one-fourth of this aggregate is so badly damaged as to be unfit for milling purposes, or rather unfit to be used in making class of flour usually expected from Northwestern wheat.

There was a meeting of Minnesota millers in Minneapolis on November 7th. Quite a number of towns were represented. Among the outside millers present were A. L. Sackett, St. Peter; E. R. Smith, Le Sueur; B. B. Sheffield, Faribault; W. W. Palmer, Mankato; R. D. Hubbard, Mankato and C. L. Roos and C. Silversen, New Ulm. The session was executive. The idea of holding the meeting was to consider the general milling situation in the Northwest, to figure on the wheat crop and the output, and to consider other matters of special concern to the fraternity.

The Upper Ohio Valley Milling Association is a new association formed in October. The officers are: President, C. Metsch, East Liverpool; vice-president, James Lee, Toronto; treasurer, F. M. Mooney, Steubenville; secretary, D. C. Black, Salineville; executive committee, John Sheal,

Steubenville, B. M. Allison, Wellsville, and A. R. Elson, Magnolia. Among the members are Jas. Ralston, Smithfield; Wm. Tallon and McGary & Black, Salineville, and E. P. Rhodes and J. B. Smith, Bridgeport. It was decided to raise the grade of wheat in flour and have uniform prices.

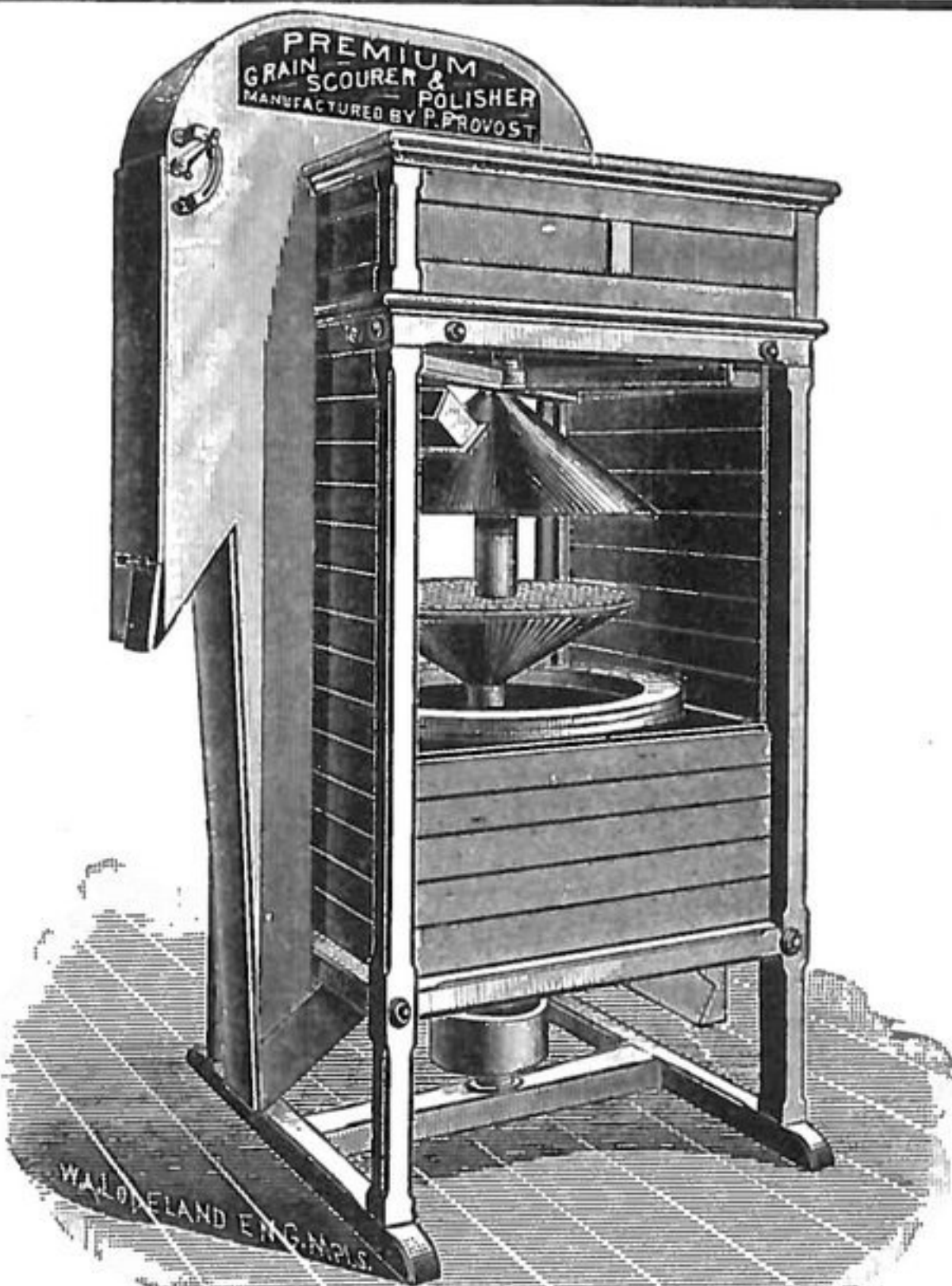
The North Dakota Millers' Association in session at Fargo, recently, was called for the purpose of perfecting arrangements for supplying the London agent of the association with the amount of flour which his trade demands for the coming year. He has asked for 50,000 barrels, or about 1,000 barrels per week, and it was proposed, if possible, to furnish him with that amount. Mr. Hillyer, their agent, reports a rapidly increasing demand for North Dakota flour, and states that certain grades sell in that market for two shillings more than the same brand from the Minneapolis mills.

The Central Indiana millers held a meeting in Indianapolis in October. About a dozen millers were present. N. Bradley was chosen chairman, H. Heath vice-president, and E. E. Perry secretary. They will create a permanent association for Central Indiana, to co-operate with the Northern and Southern Indiana Associations, at the meeting in Evansville in May, 1891, to re-organize the State association. J. A. Thompson, Edinburg, Geo. W. Kennedy, Shelbyville, A. N. Wilkinson, Knightstown, and E. E. Perry and H. C. Williams, Indianapolis, were chosen as a committee to revise the constitution and by-laws. This association numbers 26 members, and will hold the next meeting in Indianapolis, on Tuesday, December 2d. The prospect for a strong association is bright.

BOOKS AND PAMPHLETS.

The December *Scribner's Magazine* is a beautiful holiday number. The contents include: "The Plank Way to Benten Cave," Frontispiece, drawn by Robert Blum; "Japonica—First Paper—Japan, the Country," by Sir Edwin Arnold; "Horace, Book III., Ode XXIX.—To Mæcenas," the translation by Helen Leah Reed; "My Disreputable Friend, Mr. Raegan," by Richard Harding Davis; "A Pastoral Without Words," twelve drawings, by Howard Pyle; "Amy Robsart, Kenilworth and Warwick," by William H. Rideing; "The Reed Player," by Duncan Campbell Scott; "As the Sparks Fly Upward," by George A. Hibbard; "Neapolitan Art—Morelli," by A. F. Jacass; "The Plumb Idiot," by Octave Thanet; "From the Japanese," by Richard Henry Stoddard; "Christie's," by Humphry Ward; "The Lady Hannah—A Ballad of Captain Kidd," by James Herbert Morse; "Jerry"—part third, Chapters I.—III; "The Point of View," literature and Christmas—A national theater—Running in grooves—The man and the newspaper.

The December *Century* is more "Christmasy" than is usual with that magazine, there being a Christmas story by Joel Chandler Harris, and a Christmas poem by President Henry Morton, of Stevens Institute, while the editor in "Some Christmas Reflections" says that perhaps the readers may find as much of the true Christian feeling in Dr. Abbott's article "Can a Nation Have a Religion?" and in the article on the "Record of Virtue," as in the more ostensibly Christmas "features" of this number of *The Century*. The frontispiece is a striking head, "Daphne," and the opening paper is General Bidwell's account of "Life in California Before the Gold Discovery." Here is also published "Ranch and Mission Days in Alta California." The hundredth anniversary of the death of Franklin is marked by Mr. Charles Henry Hart's paper on "Franklin in Allegory." The fiction of this number includes stories by Joel Chandler Harris, Elizabeth Stuart Phelps, Richard Harding Davis, Maurice Thompson, E. Hopkinson Smith and James Lane Allen. After the autobiography of Jefferson, the famous comedian, it is interesting to read the views on acting by Tommaso Salvini. Other illustrated papers are Mr. Maclay's "Laurels of the American Tar in 1812," and the second of Mr. Rockhill's series on Tibet, this one being called "The Border-Land of China." The poetry of the number has a half dozen novel pieces entitled: "Some Boys," by James Whitcomb Riley. Other poets of this number are Austin Dobson and Celia Thaxter. George Parsons Lathrop tells the pathetic story of "Marthy Virginia's Hand."



THE PREMIUM GRAIN SCOURER AND POLISHER.

This machine is guaranteed to do more and better scouring than any other machine in existence. Is easily set up, requires little or no care, except oiling.

Samples of Work Sent on Application

Address for full particulars,

PETER PROVOST

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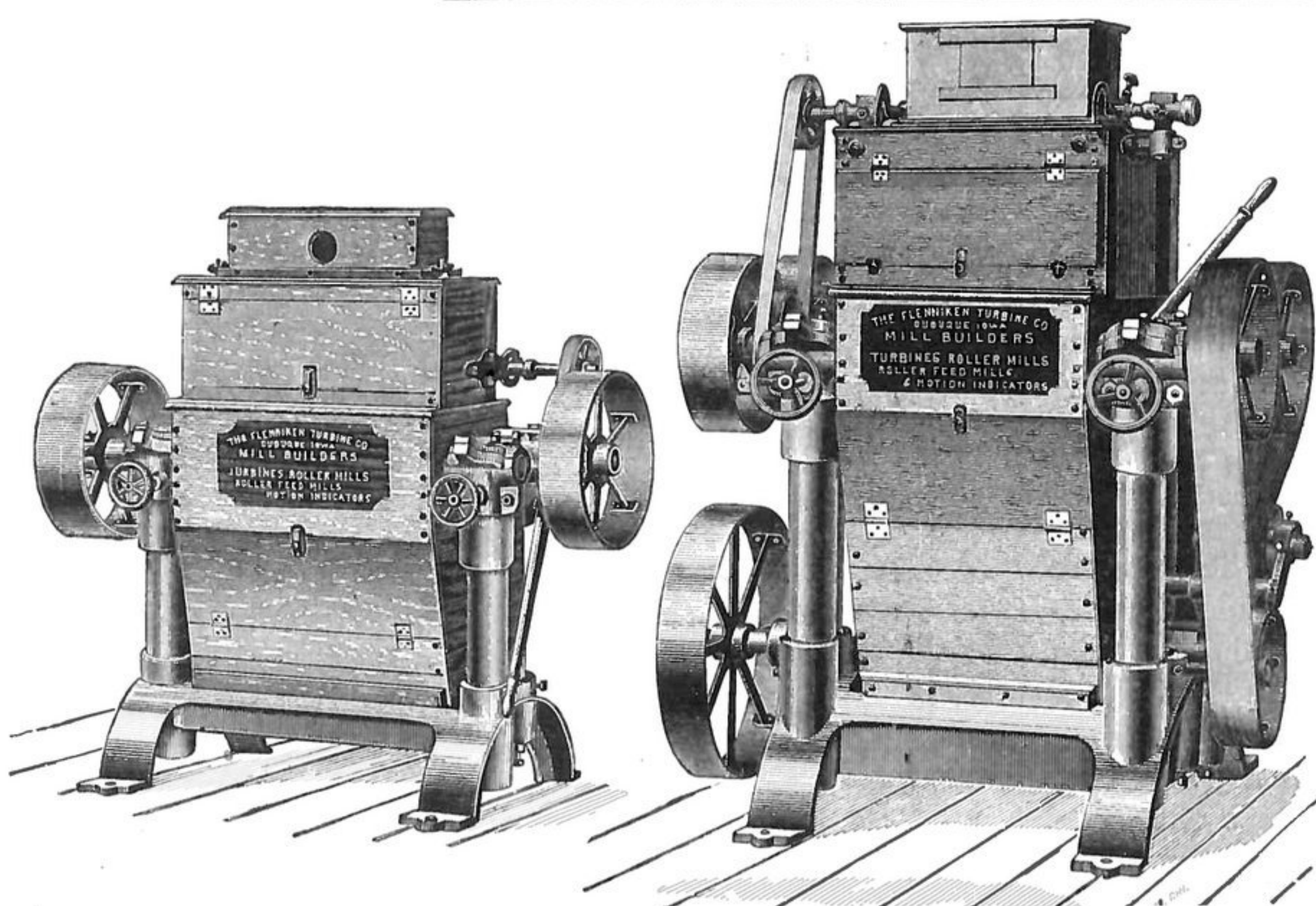
MINNEAPOLIS, MINN.

ONE REDUCTION TO THE FRONT!

*Ye jolly millers, one and all,
Who granulate with burrs,*

A Moses has Come to Deliver You from Egypt. Cease Trying to Make Bricks without Straw. The Red Sea of Expense Has Been Divided.

The Wilderness of Reductions has Been Shortened. There is Manna in Abundance for Those Who Believe. Listen to the Glad Tidings of Great Joy!



ONE REDUCTION ON ROLLS IS A SUCCESS! Two years of experience in a dozen States, with all kinds of Wheat and diversified climates, has justified us in recommending its adoption in place of burrs in each and every case, whether for grinding Wheat, Rye or Buckwheat. We have perfected Roller Mills, Bolts and Scalpers peculiarly adapted to the wants of Small Mills, and all our machines *infringe no patents*, and no claims are made that they do.

Having consummated a bargain with **MR. O. C. RITTER**, the author and patentee of **One Reduction**, which gives us the *exclusive right* to construct mills under his patents, our patrons in the future will receive a license from Mr. Ritter.

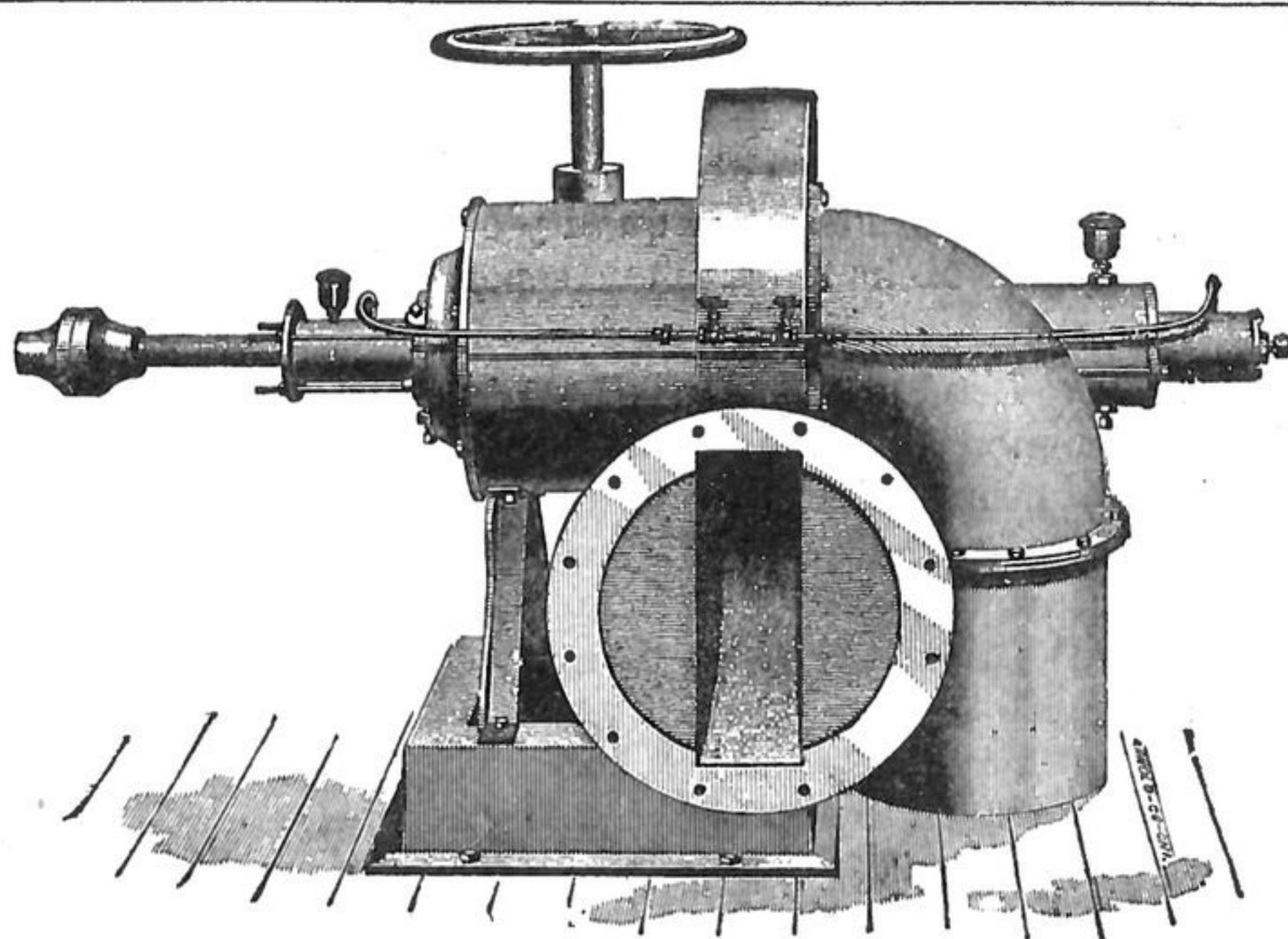
SPECIALTIES! { Graham Roller Mills, Round Reels and Scalpers, Sectional Round Reels, Grain Separators, Motion Indicators. Before buying any of these machines send for our prices and descriptive circulars. } **SPECIALTIES!**
Second-Hand Machinery, and Bargains in Every Line.

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The Best Turbines!

VERTICAL OR HORIZONTAL,
With or Without Iron Flumes,

—BUILT BY THE—



Flenniken Turbine Co.

DUBUQUE, - IOWA.

EUROPEAN ECHOES.

IN anticipation of the voting of the bill for the provisioning of fortresses, which the French Minister of War is about to submit to the Chamber, the Paris Municipal Council has considered a proposal for (1) compelling every baker to keep a three months' stock of flour; (2) for creating a fund for advancing the money for these stocks (this would only be the revival of an old institution); and (3) the institution of municipal warehouses and mills. The subject was referred by a large majority to the financial committee, but it is not believed that any decision will be taken until the fate of the War Minister's bill has been decided by the Chambers.

THE latest and also the most harrowing description of Great Britain's poor is furnished in "General" Booth's new book, "In Darkest England," wherein he estimates the starving population as follows: Houseless, loafers, casual aid, some criminals, 165,500; casual earnings or chronic want, 1,550,000; total houseless and starving, 1,715,500. In work-houses and asylums, 190,000. Total 1,905,500. Of the houseless and starving General Booth says 87,000 receive outdoor relief, which, with the number of indoor paupers and lunatics, gives a total of 2,000,000 dependent upon public charity. Then there are at least another million not enumerated here which, the author says, "brings my total to 3,000,000, or, to put it roughly, one-tenth of the population. According to Lord Brabason and Mr. Samuel Smith, both good English authorities, between 2,000,000 and 3,000,000 of the population of the United Kingdom are always pauperized and degraded."

At a convention of Russian millers lately held at Odessa four questions were submitted, principally to millers of Cherson and other South Russian provinces. These with their answers were as follows: 1. Is it desirable that instead of exporting wheat we should export flour? Ans. Yes. 2. Does our flour favorably compare with the flour of other countries? Ans. It not only equals all others exported from other countries, but exceeds in quality many of them. 3. Where does our flour go now, and is there a chance of acquiring new markets? Ans. Flour exported from South Russia goes to France, Italy, Great Britain, Egypt, Turkey and Brazil; the greater bulk goes to Great Britain. 4. Is the quality of our flour satisfactory to the buyers? Ans. Our flour is not quite good enough for France, where bread is made of the very best of flour; but it is second-best, such as Nos. 1, 2, 3 and 4, which numbers, in comparison with the same numbers abroad, are of a better quality and quite satisfactory to the English buyers. To meet the wishes of foreign purchasers it is proposed to establish Russian agencies abroad for the purpose of further developing the trade. With this end in view, and to prevent any dishonesty at home, there will be established in Odessa a controlling office, to see that the quality of flour is properly assorted, and the sacks marked correspondingly.

SAYS the London "Millers' Gazette of November 10th: During the months of September and October the imports of flour into the United Kingdom have not shown such a falling off, compared with last year, as might have been expected. Reduced to sacks of 280 pounds, the imports in these months during the past three years have been as follows: In 1890 the total was 1,025,000 sacks, against 1,030,000 sacks in 1889, and 1,299,000 sacks in 1880. There is, however, every reason to suppose that during the remainder of the present season the imports will show a much greater decrease. Last season, for instance, the total imports were 6,627,500 sacks, and in 1888-89 the total was 5,735,000 sacks. The total in the present season will probably not exceed 5,500,000 sacks. Allowing for the natural increase in our requirements, therefore, British and Irish millers will have to produce about 1,500,000 sacks of flour more than they did in the past season, a prospect which is all the more cheering that the American competition, besides being less bulky in

extent, is and will be less acute in the matter of price. It is indeed a fact that for some time past American "patents" have been easily undersold by our home millers, who of late years have brought up the quality of their "patents" very materially; while "bakers'" brands, which for a long time used to be freely bought by millers for mixing purposes, no longer leave any margin for that purpose, the bulk of the trade being therefore done with bakers. The imports into the United Kingdom for the 10 months ended Oct. 31 are as follows, compared with the two previous years, the figures being in hundredweights:

	1890.	1889.	1888.
From Atlantic ports.....	9,126,388	6,592,669	10,485,993
California.....	1,268,175	1,086,094	859,395
Austria-Hungary.....	1,097,984	1,491,357	1,512,672
Germany.....	667,429	1,015,520	659,156
Russia.....	151,678	210,178	192,398
Canada.....	601,835	781,347	678,607
Sundries.....	311,690	189,714	224,476
Total.....	13,225,179	11,366,879	14,612,697

It has to be added that most of the flour received from Germany is of Hungarian manufacture.

FOLLOWING is the European estimate of the world's wheat crop for 1890, in comparison with the crops of 1888 and 1889. European dealers, importers, exporters and millers generally accept and act upon these figures:

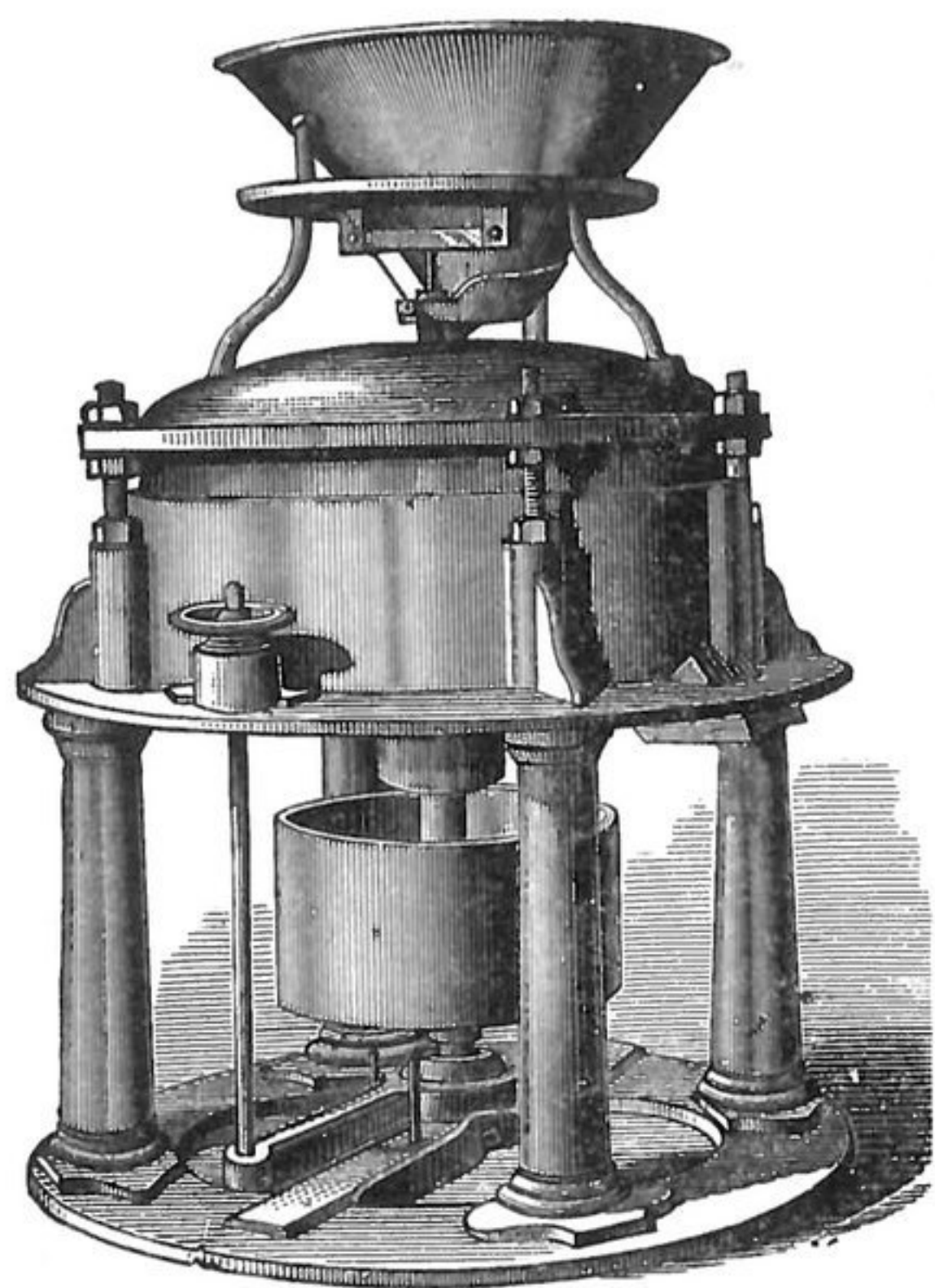
	1890, quarters.	1889, quarters.	1888, quarters.
Austria.....	6,000,000	4,680,000	6,300,000
Hungary.....	19,725,000	11,576,000	17,133,000
Belgium.....	2,400,000	2,400,000	2,100,000
Bulgaria.....	4,500,000	4,400,000	4,500,000
Denmark.....	700,000	625,000	480,000
France.....	40,000,000	38,250,000	34,418,000
Germany.....	11,500,000	10,625,000	11,503,000
Greece.....	1,500,000	1,375,000	1,250,000
Holland.....	750,000	750,000	600,000
Italy.....	15,375,000	12,580,000	12,630,000
Norway.....	50,000	50,000	50,000
Portugal... ..	1,000,000	1,000,000	850,000
Roumania.....	7,500,000	5,437,000	7,060,000
Russia (including Poland)	26,100,000	22,800,000	37,500,000
Servia.....	1,250,000	750,000	1,075,000
Spain.....	8,500,000	9,200,000	8,220,000
Sweden.....	450,000	463,000	462,000
Switzerland.....	300,000	300,000	250,000
Turkey (Europe).....	4,500,000	4,500,000	5,000,000
United Kingdom.....	9,500,000	9,485,000	9,311,000
Total for Europe.....	161,600,000	141,246,000	160,632,000
Algeria.....	2,750,000	1,970,000	2,745,000
Argen. Republic.....	2,750,000	2,750,000	1,500,000
Australasia... ..	5,000,000	5,275,000	3,275,000
Asia Minor.....	4,500,000	4,500,000	4,500,000
Canada.....	4,750,000	3,750,000	4,000,000
Cape Colony.....	450,000	457,000	476,000
Chili.....	2,250,000	1,775,000	1,500,000
Egypt.....	1,000,000	875,000	1,000,000
India.....	29,000,000	29,643,000	32,546,000
Persia.....	2,750,000	2,750,000	2,800,000
Syria.....	1,500,000	1,500,000	1,750,000
U. S. America.....	50,000,000	61,320,000	51,983,000
Total out of Europe..	106,700,000	116,565,000	108,075,000
Grand Total.....	268,500,000	257,811,000	268,707,000

A NEW METHOD OF TREATING DISEASE.

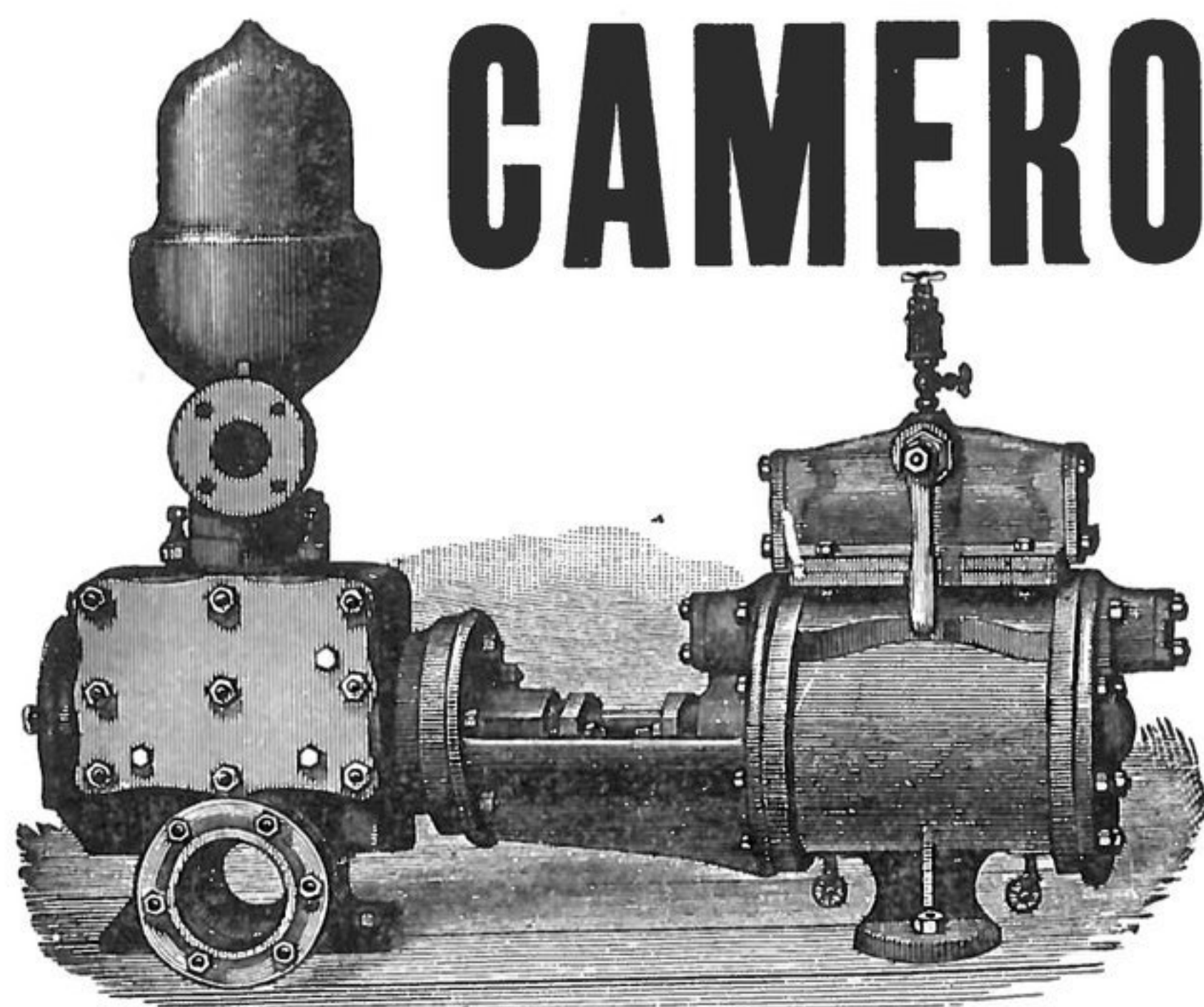
HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage by Hospital Remedy Company, Toronto, Canada, sole proprietors.



MUNSON BROS., UTICA, N. Y.,
—MANUFACTURERS OF—
PORTABLE MILLS
FOR CORN AND FEED GRINDING,
—WITH—
FRENCH BUHR and ESOPUS STONES
Shafting, Pulleys, Hangers, Etc., and General
Mill Furnishings.
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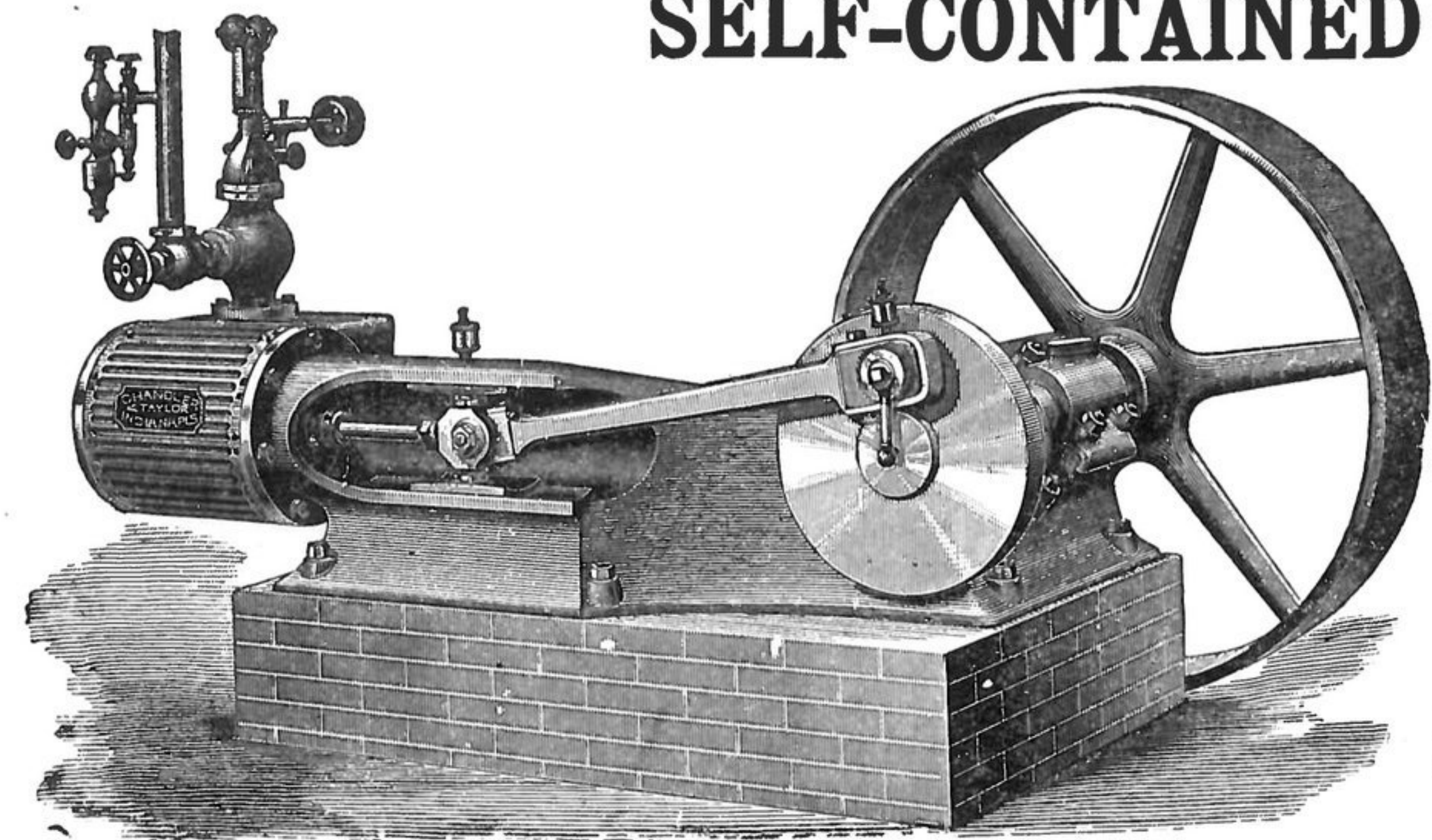
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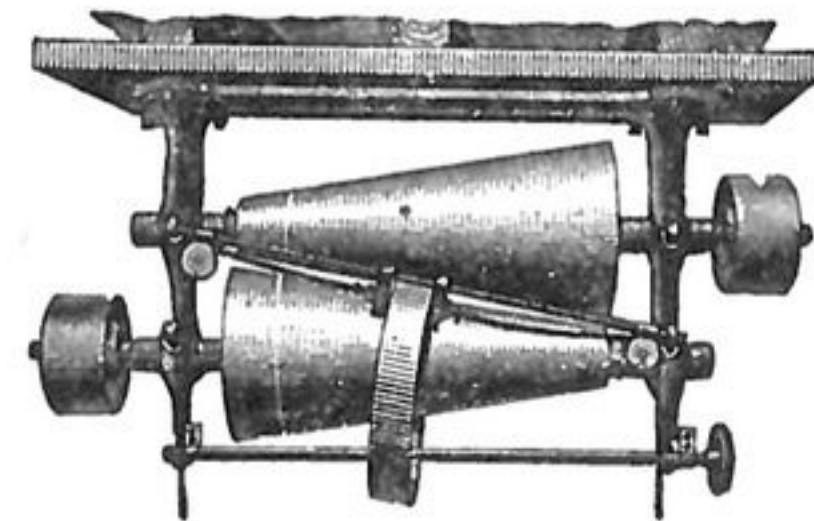
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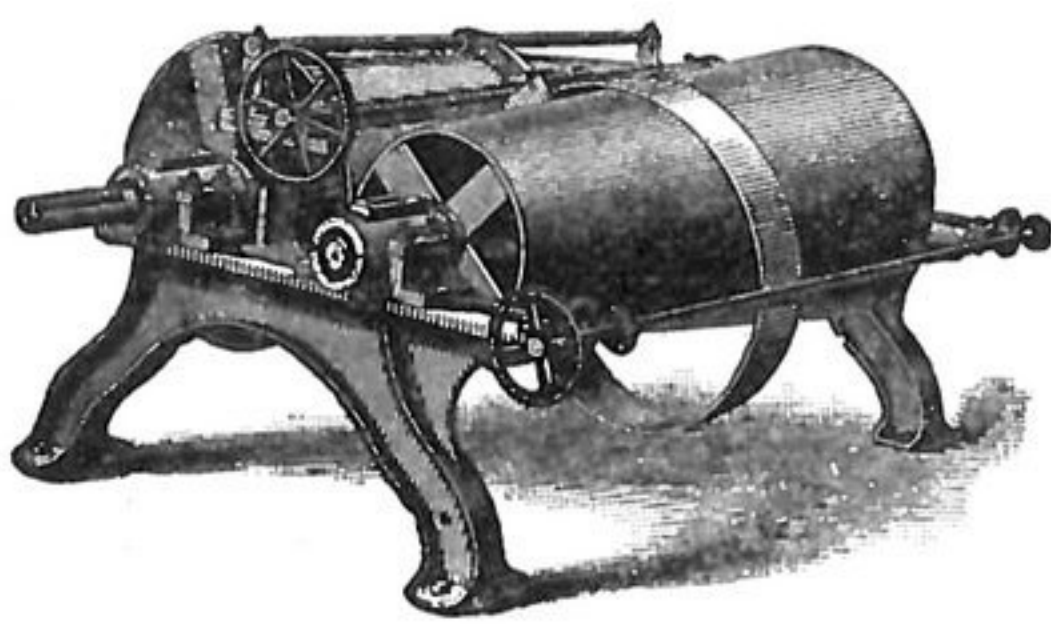
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Machinery a Specialty.

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"PATENTED."



This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is



fluctuating. All sizes made from 1/2 Horse Power to 50 Horse Power. **SEND FOR ILLUSTRATED CATALOGUE.**

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SHIPPERS
CAN SAVE TIME
AND TROUBLE
AND CASH
BY USING
BARLOW'S
PATENT
MANIFOLD
SHIPPING
BLANKS. SEND FOR
SAMPLE SHEET AND PRICES
BARLOW BROS. GRAND RAPIDS, MICH



OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., Nov. 29, 1890.

Friday of last week showed that the cereal markets were not "down" because of the "statistical situation," and that they were down solely because of the financial excitement and in sympathy with the depression wrought by speculation in other lines. The markets were generally stronger on a decided let-up in the financial pressure and on returning confidence. In New York November wheat closed at 99½c., and May at \$1.06½. Atlantic port receipts were 48,617, exports 53,735, and options 4,328,000 bushels. November corn closed at 57½c., with receipts 84,907, exports 13,667, and options 736,000 bushels. December oats closed at 48½c., with receipts 161,026 and exports 20,510. Wheat flour steadier with wheat. No forced sales or important concessions were reported. Receipts included 11,842 sacks and 30,544 barrels, and exports 24,079 sacks and 7,162 barrels. The minor lines sympathized with the principal ones.

Saturday brought still more strength, activity and excitement, on lighter receipts, covering of shorts, returning confidence and a generally improved financial outlook. November wheat closed at \$1.02, December at \$1.02½, January at \$1.03½, February at \$1.04½, March at \$1.05½, and May at \$1.05½. Receipts were 49,936, exports 114,979, and options 3,684,000 bushels for the half-day. The wheat bears began to look as though they would like to "lay down." November corn closed at 58½c., with receipts 122,347, exports 14,961, and options 816,000 bushels. December oats closed 49c. and May at 51½c., with receipts 121,087 and exports 20,947. Wheat flour was in better demand and higher for the high and medium grades, and the feeling was generally bullish. Receipts were 13,884 sacks and 36,761 barrels, and exports 2,590 sacks and 6,734 barrels. All the minor lines were stronger. The week closed with a decidedly improved situation in general.

Monday brought still higher, more active, excited and irregular cereal markets, on covering of shorts, smaller receipts and a better tone in the money markets. The bears could scarcely believe their own eyes when they saw November wheat close at \$1.04½c. Receipts were 86,667, exports 42,730, and options 5,292,000 bushels. November corn closed at 60½c., with receipts 181,760, exports 41,418, and options 2,336,000 bushels. December oats closed at 50½c., with receipts 193,415, and exports 14,416 bushels. Wheat flour was steadier and stronger, advancing with wheat on grades above \$4.10, especially spring patents and winter straights, which were not abundant. Receipts were 24,217 sacks and 41,320 barrels, and exports 16,495 sacks and 7,682 barrels. Grades below \$4 were weaker, in some cases 5@10c. The minor lines were all steady. The visible supply in the United States and Canada was:

	1890. Nov. 22.	1889. Nov. 23.	1888. Nov. 24.
Wheat.....	24,189,819	30,124,056	35,238,047
Corn.....	4,328,559	6,100,154	6,974,926
Oats.....	3,530,286	5,904,713	7,627,121
Rye.....	561,901	1,164,346	1,730,921
Barley.....	5,095,909	3,141,421	2,062,348

Tuesday was a day of active, irregular and generally excited markets, going higher early on shorts covering, and lower later on longs realizing. November wheat closed at \$1.03½, with receipts 97,778, exports 1,829, and options 1,700,000 bushels. November corn closed at 60½c., with receipts 180,000, exports 67,800, and options 2,045,000 bushels. December oats closed at 50½c., with receipts 219,873, exports 28,548, and options 350,000 bushels. The stock of oats in Chicago is only 350,000 bushels, against 1,850,000 last year at this date. Wheat flour was advanced by millers 15@25c. over last week,

and the trade was bidding 10@15c. more. Receipts included 25,215 sacks and 36,981 barrels, and exports were 15,326 sacks and 4,374 barrels. All the minor lines were strong and moderately active.

The following shows the amount of wheat and flour, together with the amount of corn, on passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

	1890. Nov. 25.	1890. Nov. 18.	1889. Nov. 26.
Wh. & flour, qrs.	2,375,000	2,363,000	1,780,000
Corn, qrs.....	395,000	409,000	338,000

The following shows the amount of wheat and corn on passage to the Continent for the past week, the previous week, and for the same week last year:

	1890. Nov. 25.	1890. Nov. 18.	1889. Nov. 26.
Wheat, qrs....	648,000	702,000	442,000
Corn, qrs.	101,000	90,000	159,000

India wheat to United Kingdom..... 65,000
India wheat to Continent..... 25,000

The imports into the United Kingdom for the past week and the previous week and for same week last year:

	1890. Nov. 25.	1890. Nov. 18.	1889. Nov. 26.
Wheat, qrs.....	207,000	230,000	302,000
Corn, qrs.....	58,000	127,000	133,000
Flour bbls.....	160,000	180,000	172,000

Wednesday brought a lower opening in cereals, on bad financial reports, and a higher closing on good spot demand. November wheat closed at \$1.03½, with receipts 63,650, exports 27,274, and options 2,824,000 bushels. November corn closed at 60½c., with receipts 146,081, exports 45,773, and options 1,120,000 bushels. December oats closed at 50½c., with receipts 115,358, exports 30,972, and options 265,000 bushels. Buckwheat grain was 58c. for prime on track. Rye grain was steady at the following quotations: Western 72@74c.; State 78@80c.; Canada 71@72½c. afloat full loads, and 69@73c. for car lots on track. Barley was dull and unchanged at the following quotations: No. 2 extra Canada 90@92c.; No. 1 95@97c.; No. 2 Milwaukee 79@80c.; Western nominal. Malt was as slow as ever and unchanged, so far as reported, at old quotations: New Western 93@98c.; new country Canada \$1.03@1.13; new city do \$1.08@1.18, cash and time. Old—73@80½c. for two-rowed, 78@83c. for six-rowed, 83½@90c. for country-made Canada and 90¼@98c. for city do. Mill-feed was more active and steady, with mills in the city more firm offerers; sacks 40 and 60-lbs sold at \$1.05, and sacks 40 and 80-lbs together at \$1.00@1.05. Quotations: 40, 60 and 80 lbs at \$1.05, 100-lbs at \$1.20, and rye at \$1.05.

Wheat flour was duller, with wheat, the early break checking business begun on Tuesday. Receipts included 15,493 sacks and 33,501 barrels, and exports 11,878 sacks and 21,239 barrels. Among the sales in New York were the following: City mills \$5.35; spring fine in barrels \$3.25; car lots rye mixtures \$4.25@4.35; winter straights \$5 for a fancy brand; sacks low spring to arrive \$2.78; rye mixture \$4.30; choice spring straight \$5.20; spring patent \$5.40 and \$4.90 for straight winters; fancy patent spring \$5.75; extra No. 1 winters \$4.45; spring bakers' in sacks \$4 and \$4.30 in barrels; winter clear \$4.75; patent do \$5.25 for fancy; sacks choice extra No. 1 spring \$4.25; fine at \$3.55 and No. 1 winters \$3.90@4.25 in barrels; straight at \$4.75; rye mixtures \$4.40; patent springs \$5.40; straight Southern \$4.75; No. 2 winter in barrels \$3.90; straight \$4.90; winter fine \$3.40; superfine winter \$3.65 in barrels. No. 2 \$3.90 in barrels; fine \$3.50 for city mills; fancy Minneapolis to arrive \$5.60; straight winters in lots \$4.85@5.00. The Minneapolis output last week was 188,170 barrels.

Rye flour was dull at \$4.00@4.25. Buckwheat flour was steady and dull at \$2.10@2.20. Corn products were quiet at the following quotations: Western and Southern in barrels \$3.05@3.25; Brandywine \$3.25; granulated yellow \$3.35@3.60; granulated white \$3.60@3.90; coarse bag

meal \$1.10@1.14; fine yellow \$1.24@1.29; fine white \$1.32@1.34 for city; Southern \$1.10@1.65 for coarse to granulated; brewers' meal \$1.41@1.44; hominy chops \$1.07@1.12.

Thursday was a day of rest, and the bulls and bears confined their assaults to Turkey, leaving cereals to rest undisturbed for one whole day.

Friday brought little or no change, excepting a lower tone in wheat. November and December wheat closed at \$1.02½c., with receipts 151,000, spot sales 40,000, and options 2,768,000 bushels. November corn closed at 60½c., with receipts 106,000, exports 131,000, and options 1,000,000 bushels. December oats closed 50c., with receipts 162,000, and options 205,000 bushels. Wheat flour was dull, quiet and unchanged. All the minor lines were featureless.

BUFFALO MARKETS.

Buffalo, N. Y., November 29, 1890.
The market has ruled inactive and irregular. WHEAT—Little wheat was offered and little was wanted. Sales were reported of old No. 1 Northern at \$1.10; No. 1 Northern at \$1.04½; same at \$1.04½; sample No. 2 Northern at 97c; No. 2 red at 99c, and No. 1 white at \$1.00. CORN—The market was very quiet, No. 2 yellow closing at 61c in store; new do on track at 59c; No. 2 corn at 59c, and new do on track at 58c. OATS—The market was steady, closing at 51c. for No. 2 white; 50c for No. 3 white, and 49½c for No. 2 mixed. BARLEY—Choice Michigan sells at 79@80c, fair to good at 75@78c. No. 2 Western at 75@77c and No. 3 do at 70@74c. No Canada barley is offered to a quotable extent. RYE—The market is nominally held at 75@76c for No. 2, but none is offered. OATMEAL—Akron, \$7.20; Western, \$6.95 per bbl; rolled oats, in cases, 72 lbs, \$3.85. CORNMEAL—Coarse, \$1.15@1.20; fine, \$1.20@1.25; granulated \$1.75 per cwt. MILL-FEED—City-ground coarse winter, \$19.00@20.00 per ton; fine do, \$19.50; finished winter middlings \$22.00@23.00; coarse spring do, \$22.00.

FLOUR MARKET.

Spring Wheat.	Winter Wheat.
Patents..... \$6.25@6.50	Patents... .. \$6.25@6.50
S't Bakers'... .. @5.75	S't roller... .. 5.25@5.50
Bakers' cl'r... .. @5.25	Amber... .. 5.00@5.25
B Rye mixt... .. @4.75	Crck'r flour... 5.00@5.25
Low Grades... .. @3.50	Low grades... 3.50@3.75
Rye flour.... 3.75@4.00	Graham.... 4.75@5.00

Buckwheat flour, \$2.75 per 100 pounds.

Retail prices 50c. above these quotations.

NOTES.

J. O. Norris's flouring-mill, Baltimore, Md., lost \$15,000 by fire; fully insured.

The Bosch Elevator Co.'s elevator, Cedar Rapids, Ia., burned with 196,000 bushels of barley.

M. H. Miller's steam flour-mill in Kentucky, opposite Portsmouth, O., burned; loss \$10,000; insurance \$3,000.

The Dietrick Flouring Mill, Tippecanoe, O., burned; loss \$30,000, with partial insurance.

Wm. Peter's flour-mill and elevator, Columbiaville, Mich., burned; loss \$50,000; partially insured.

J. J. McCann and others, Nashville, Tenn., are forming a stock concern, the Model Mill Co., to build a large flour-mill.

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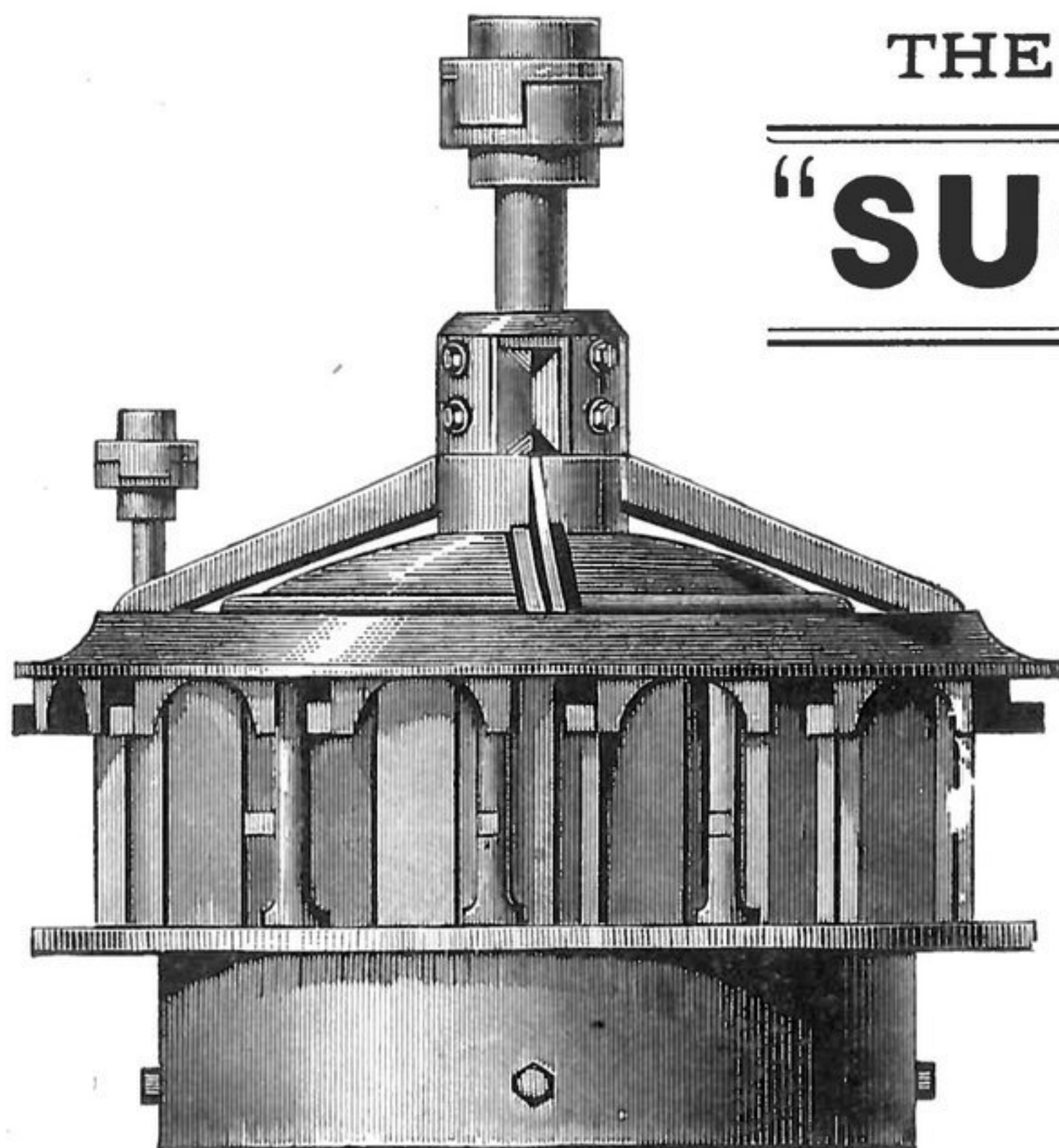
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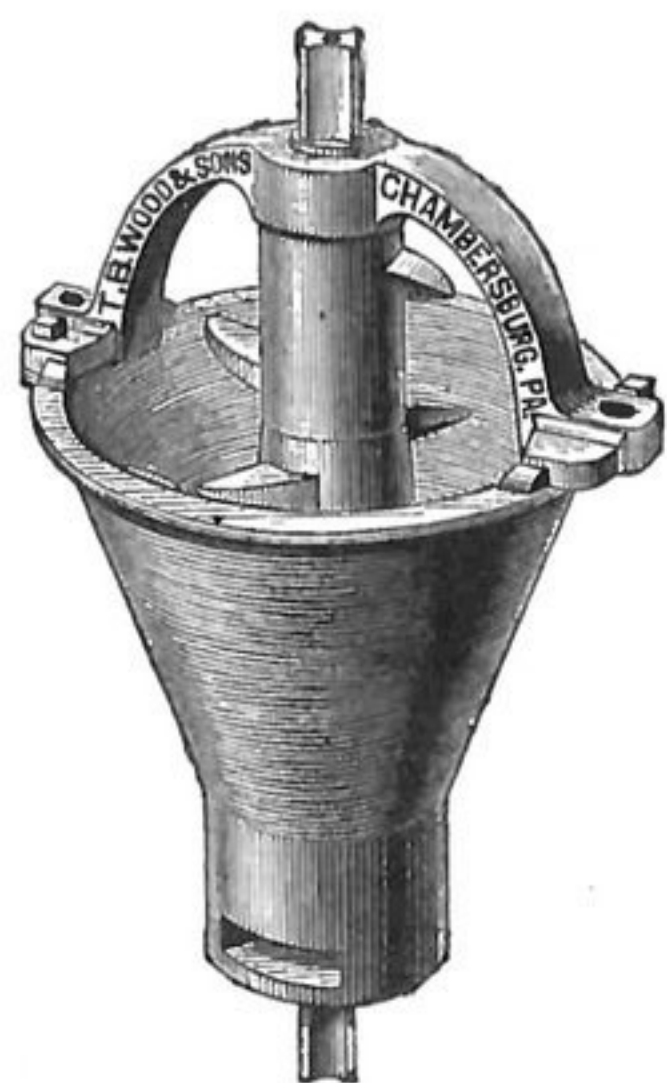
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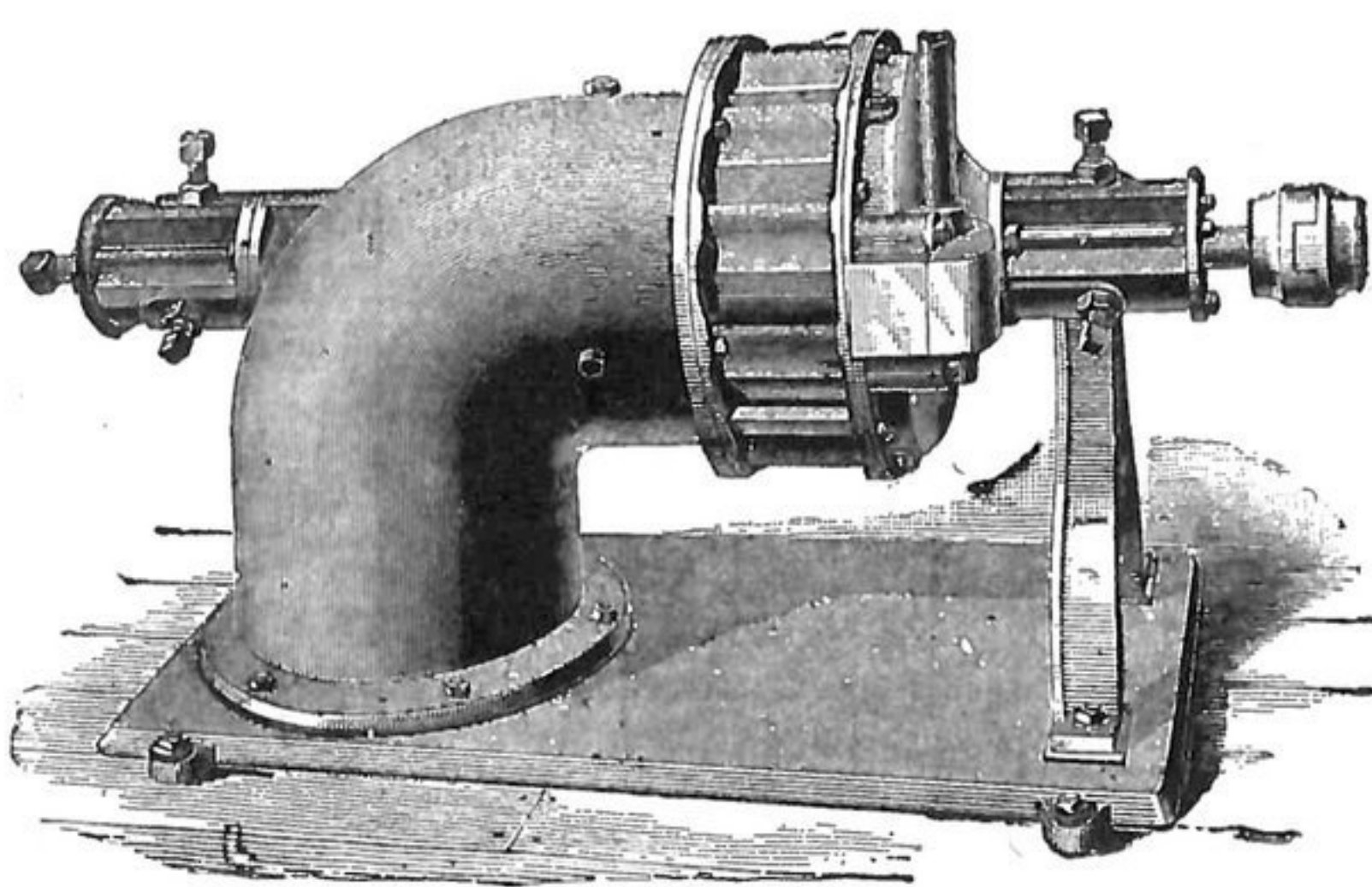
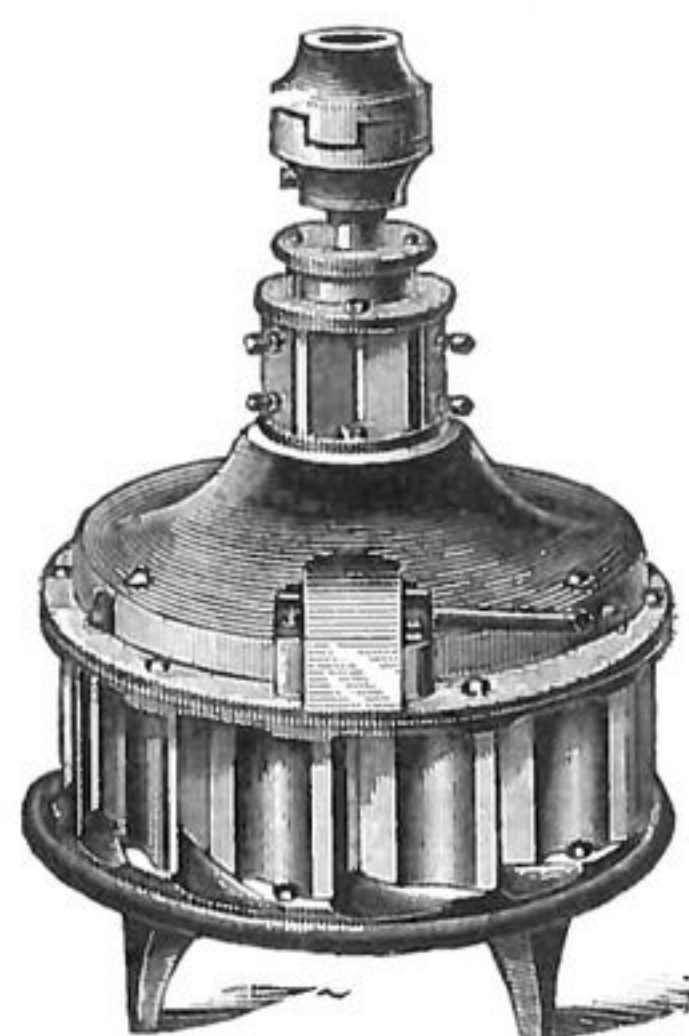


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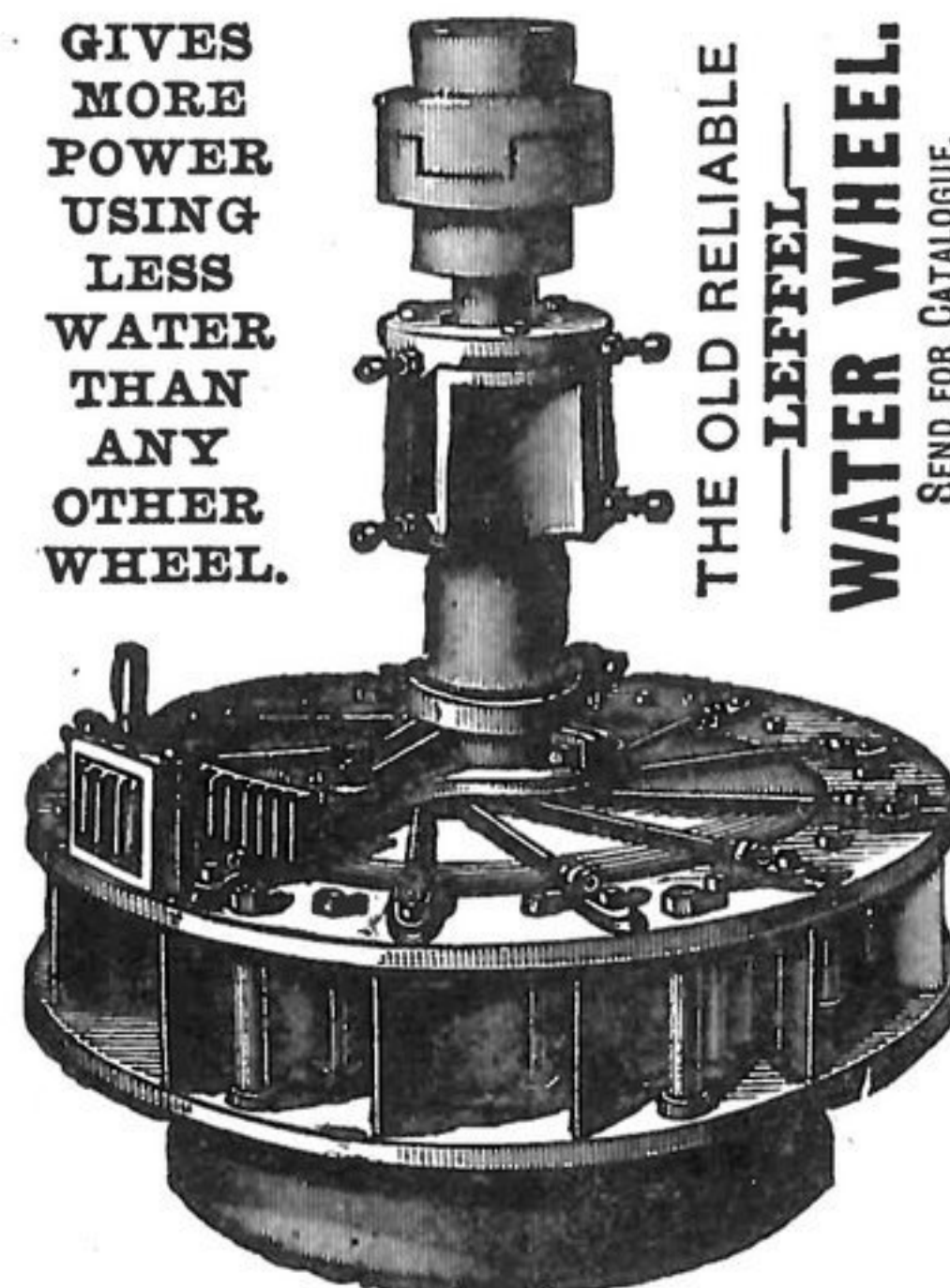
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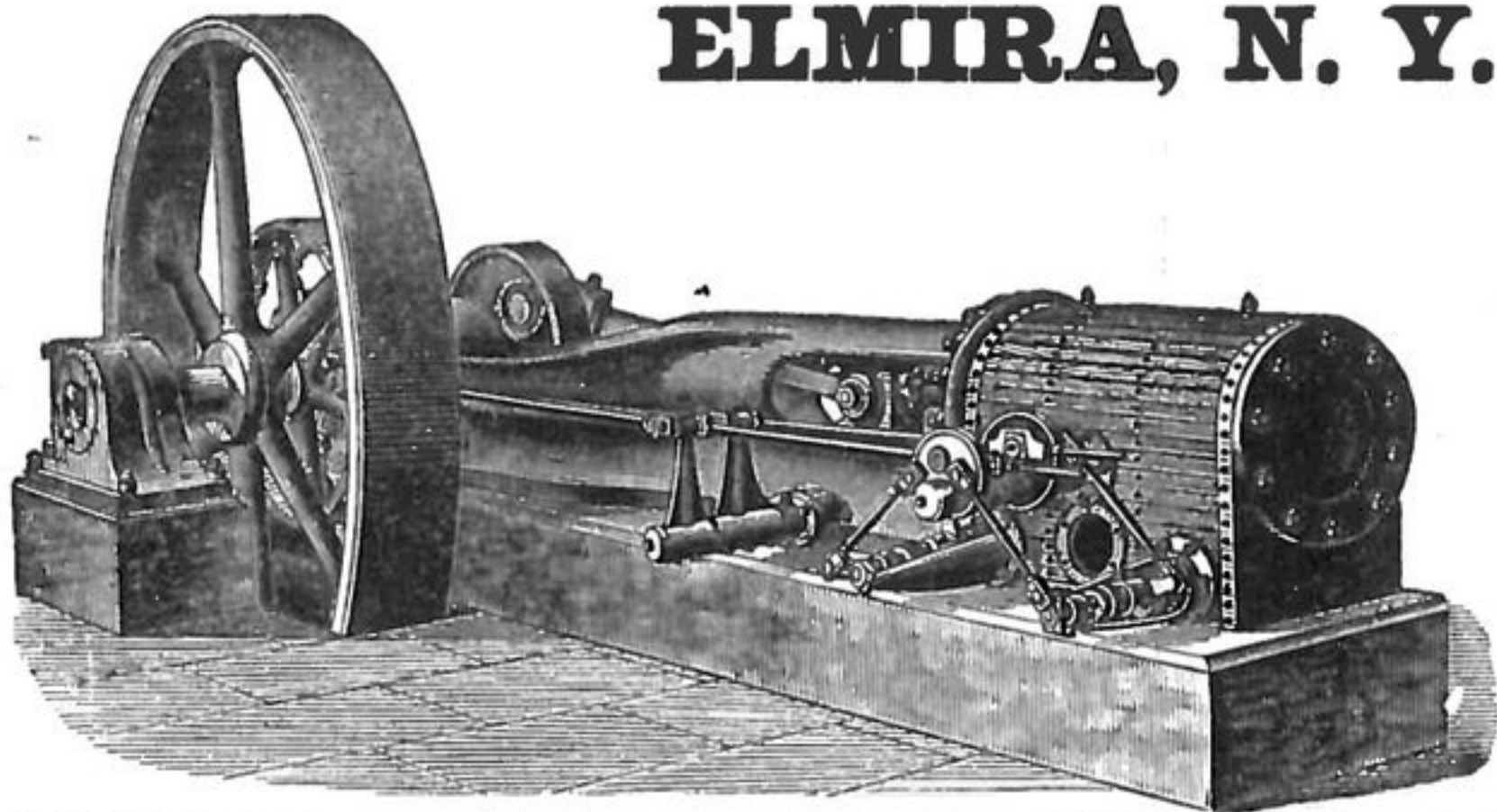
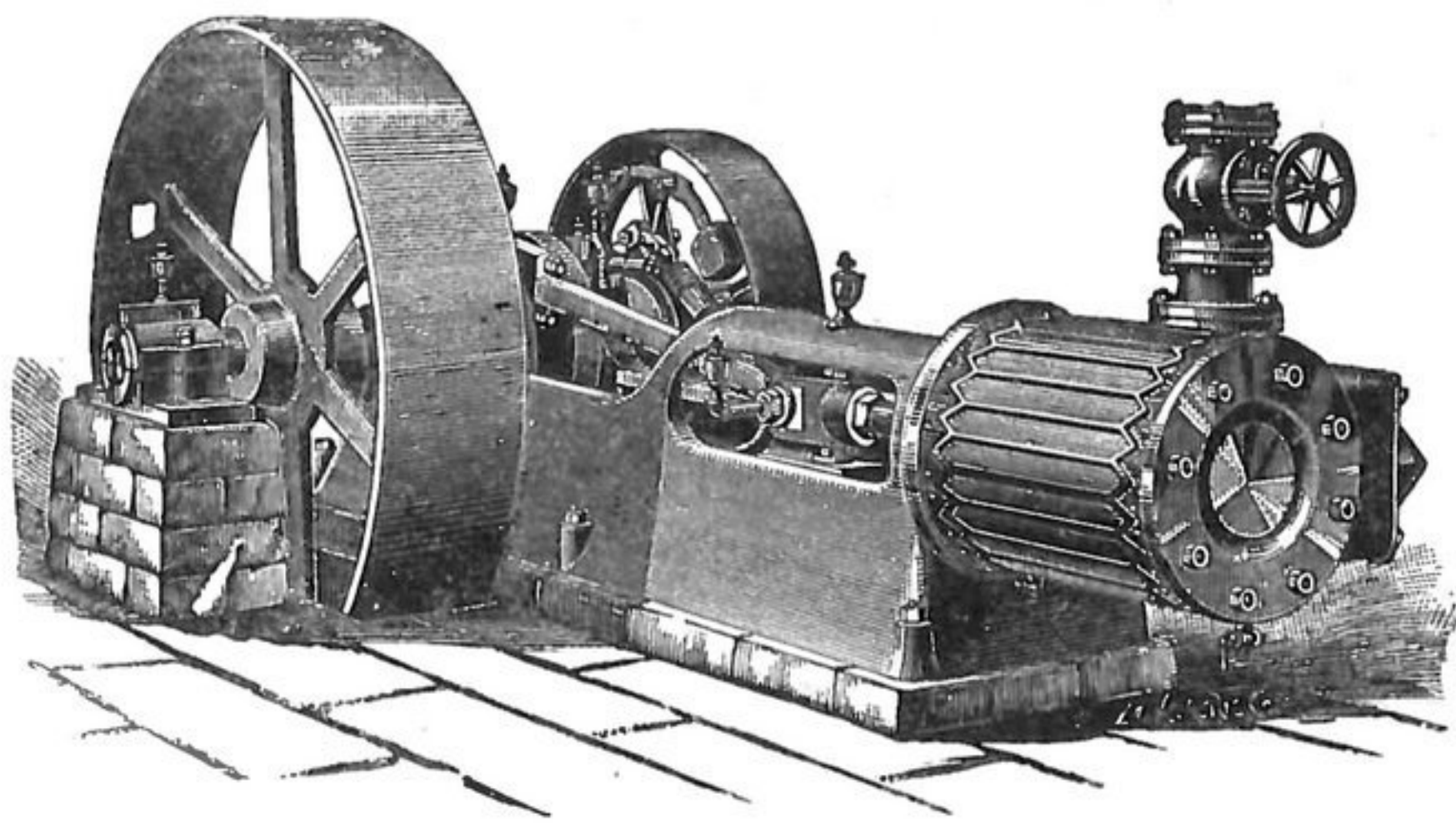
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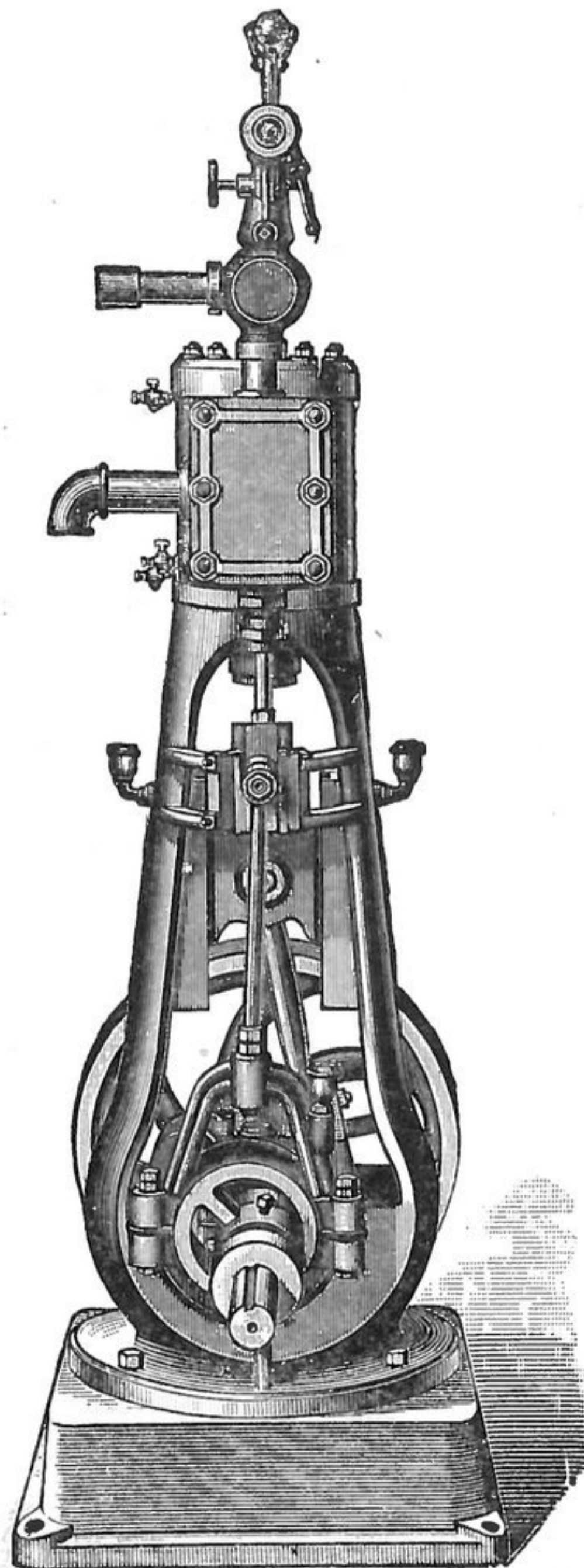
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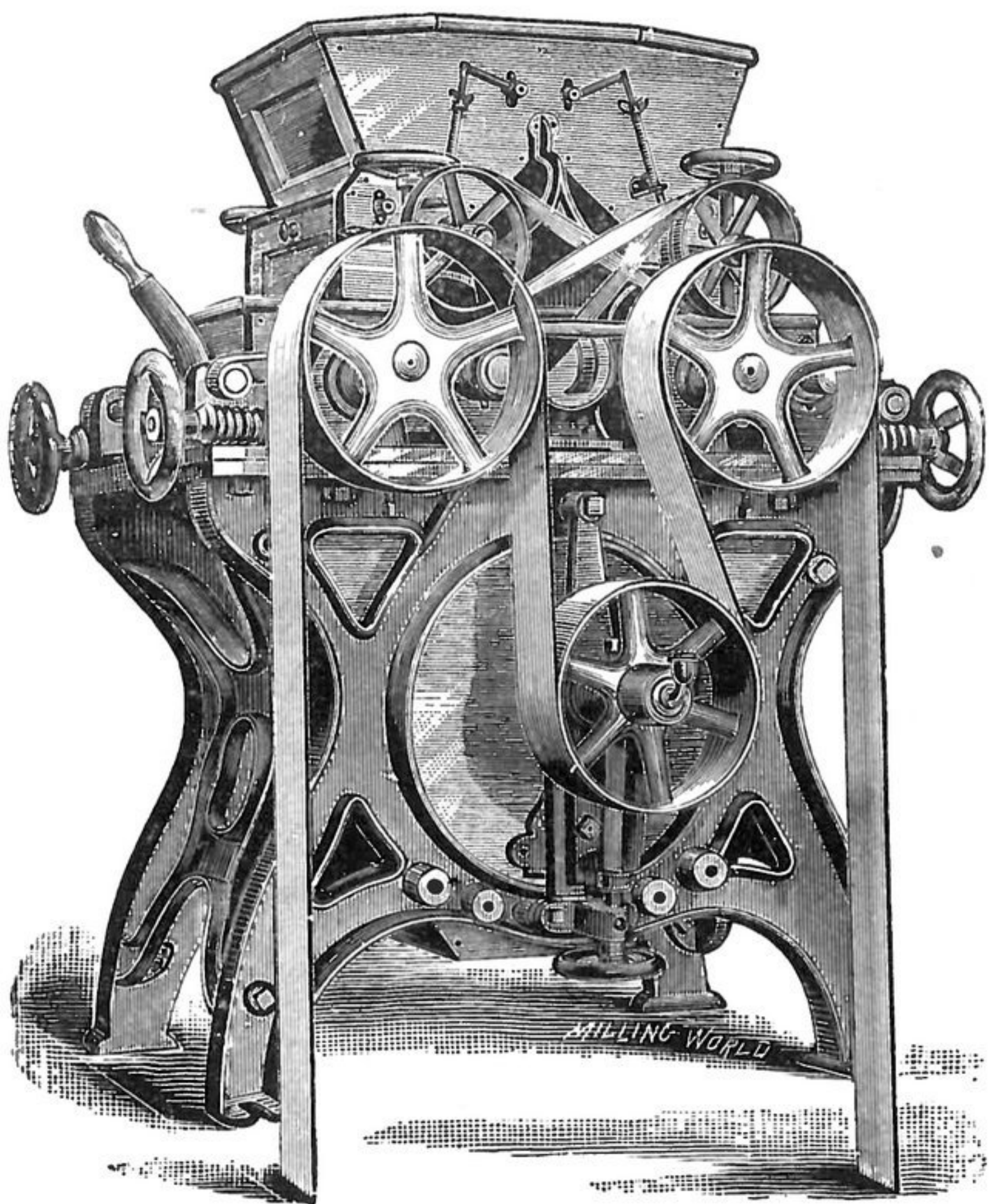
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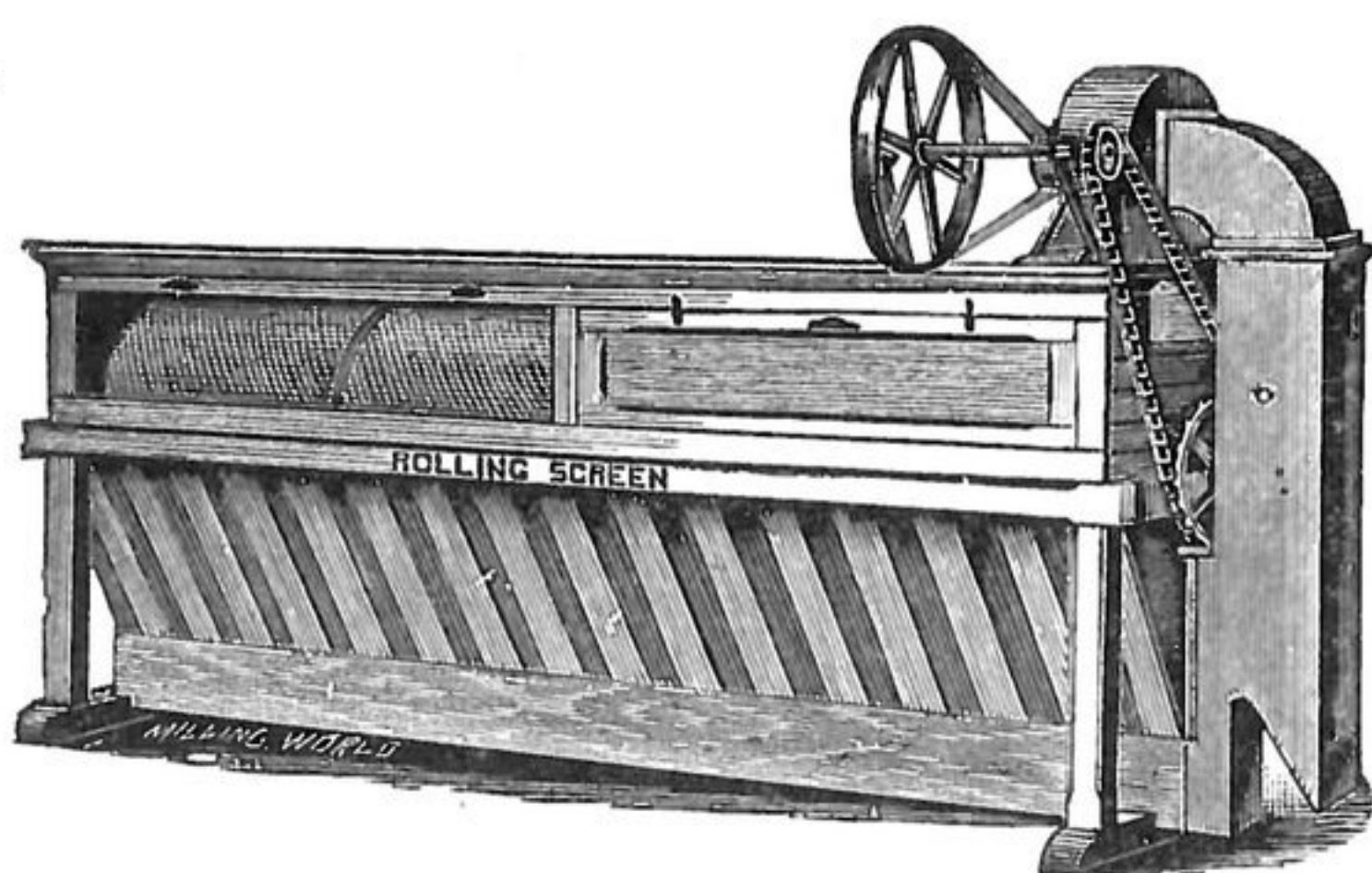
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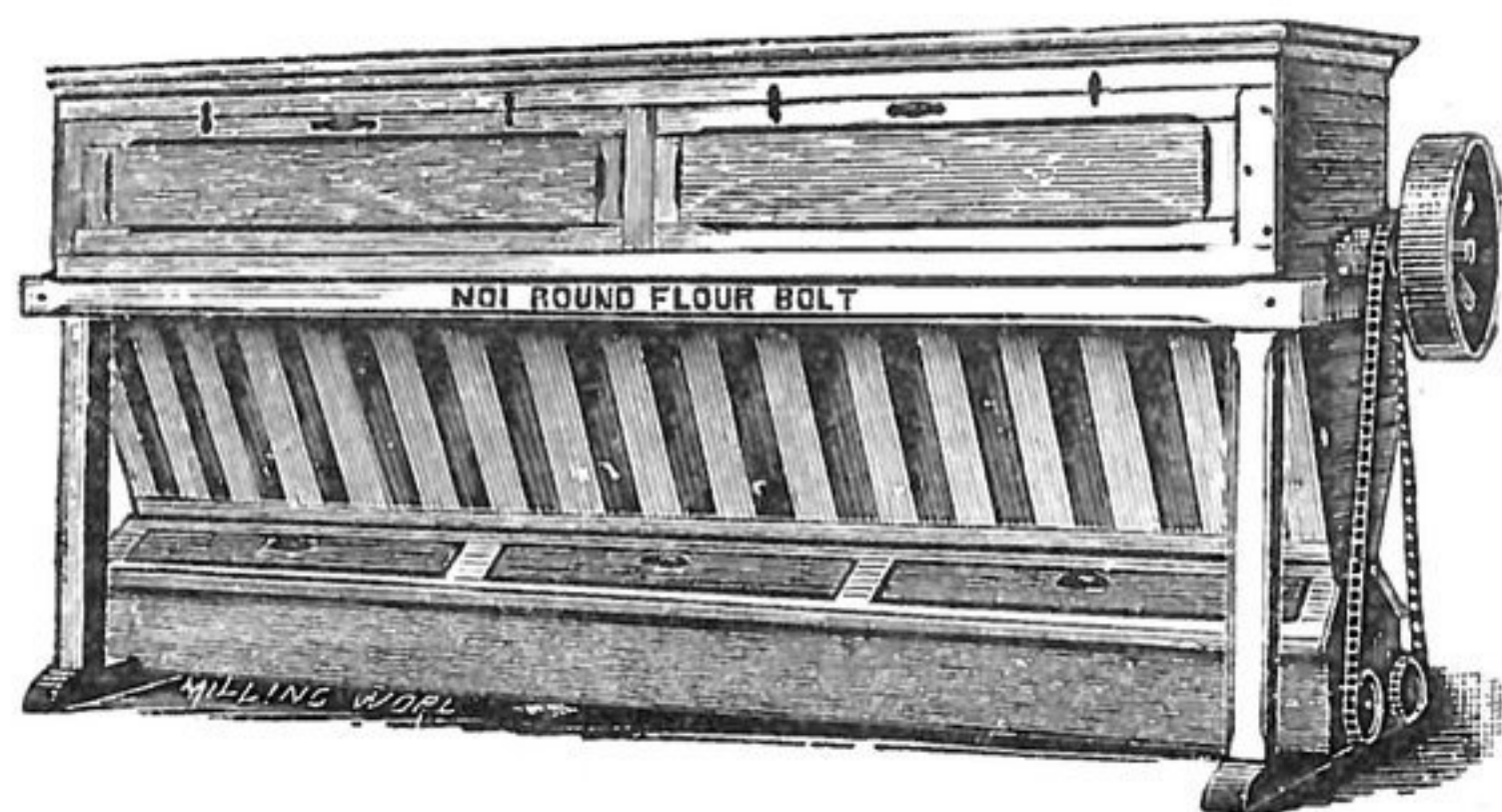
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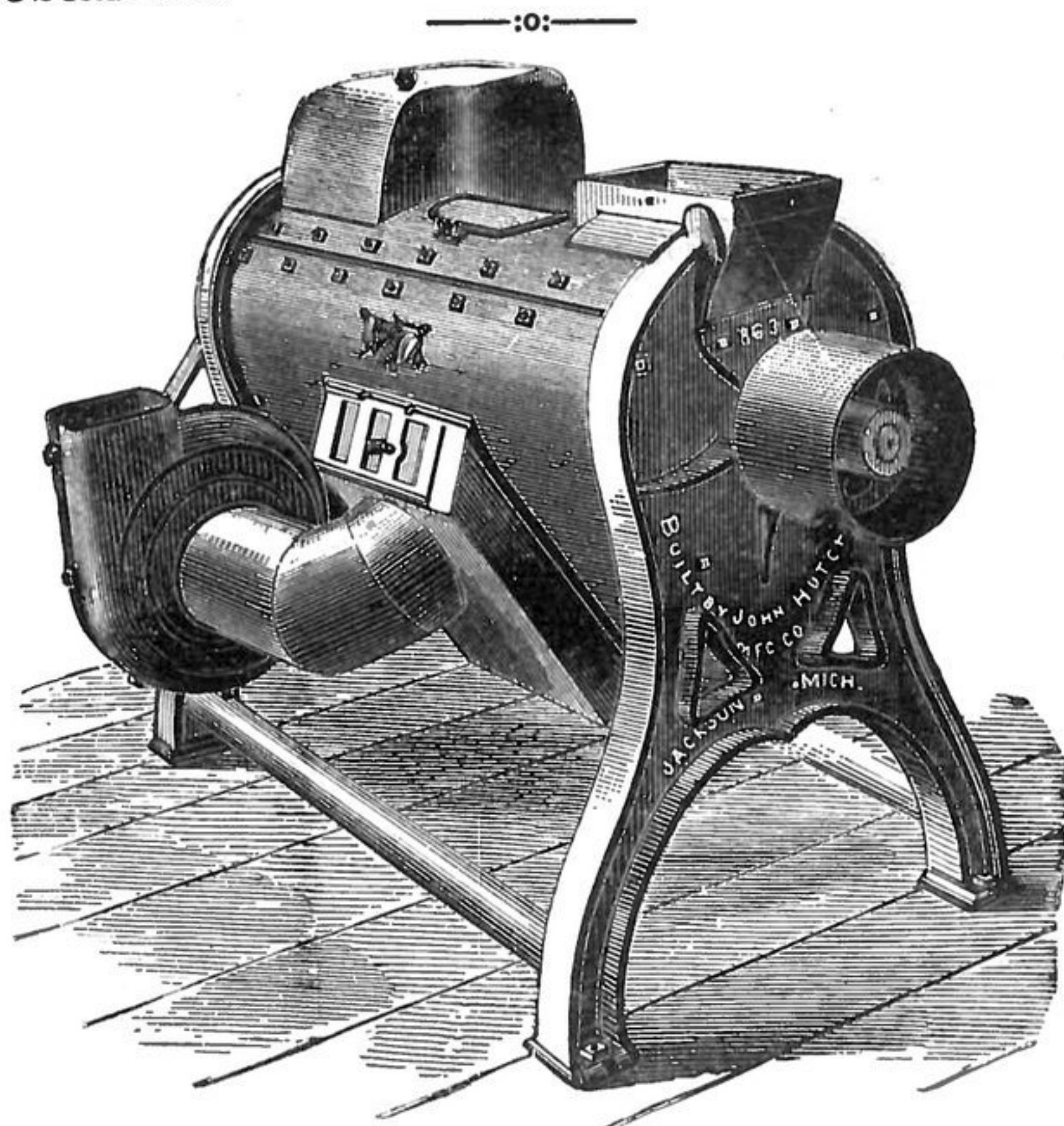


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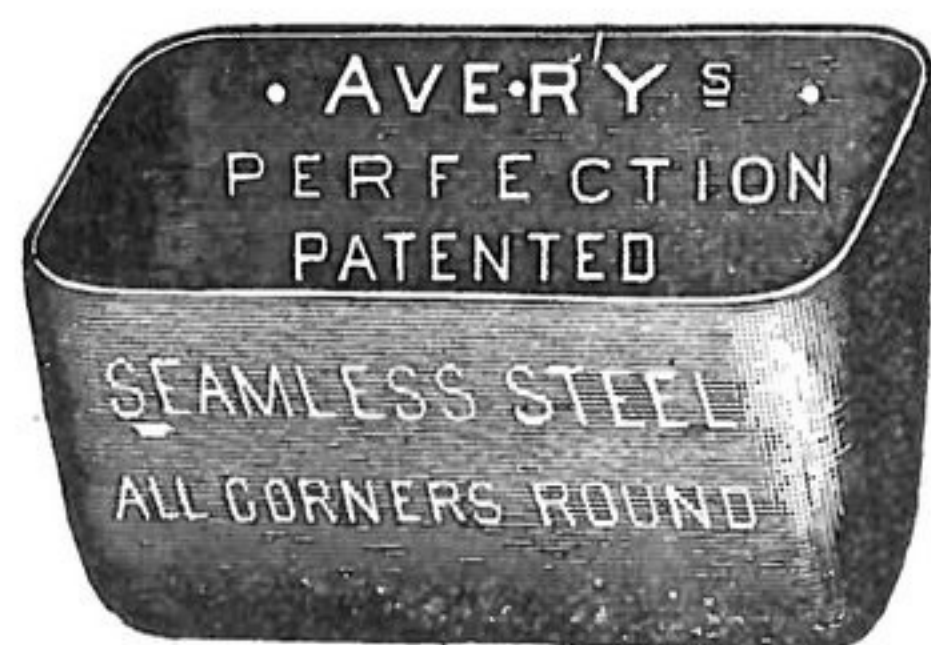


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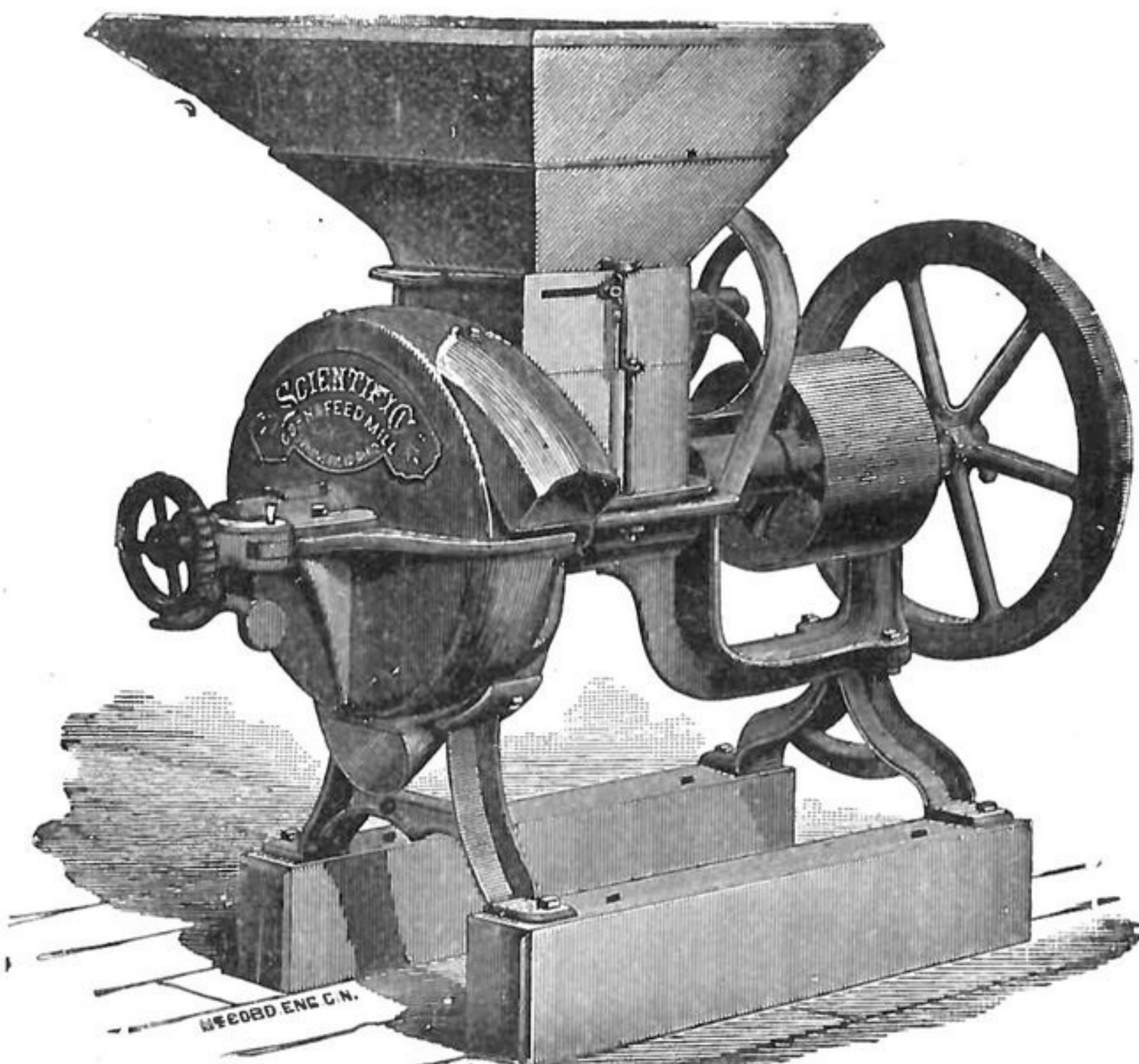
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